DAIKIN

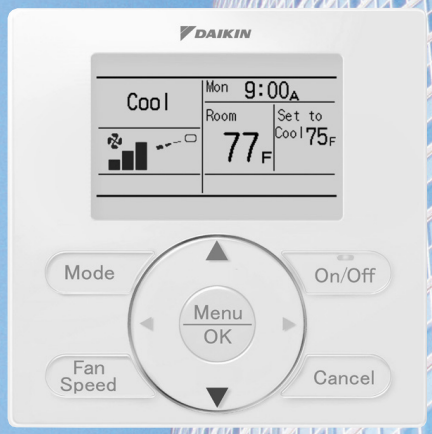
EDUS 391000 - C

R-410A

Engineering Data

VRV®

Controls



DAIKIN AC (AMERICAS), INC.

Controls

1. Control Systems 2
2. Control Devices 3
   2.1 BRC1E71 Navigation Remote Controller (Wired Remote Controller) 3
   2.2 BRC4C / 7C / 7E Wireless Remote Controller / Receiver 12
   2.3 BRC2A71 Simplified Remote Controller 14
   2.4 DCS302C71 Central Remote Controller 17
   2.5 DCS301C71 Unified ON/OFF Controller 40
   2.6 DST301BA61 Schedule Timer 48
   2.7 DCS601C71 intelligent Touch Controller 55
3. Adapter 67
   3.1 KRCS01-1B / 4B Remote Sensor 67
   3.2 DTA104A53 / 61 / 62 External Control Adapter for Outdoor Unit (Must be Installed on Indoor Units) 70
   3.3 DTA109A51 DIII-NET Expander Adapter 73
   3.4 KRP1C74 / 75 Wiring Adapter 76
   3.5 KRP4A71 / 72 / 73 / 74 Group Control Adapter) 79
   3.6 DCS302A72 Unification Adapter for Computerized Control 84

1. Control Systems

Optional Accessories of Operation Control System

No.	Item \ Type		FXFQ-PVJU	FXZQ-M7VJU	FXDQ-MVJU	FXMQ-PVJU	FXMQ-MVJU	FXHQ-MVJU	FXAQ-MVJU	FXLQ-MVJU FXNQ-MVJU	FXTQ-PAVJU
1	Remote controller	Wireless	BRC7C812	—	BRC4C82	BRC4C82 (Note 4)	BRC4C82	BRC7E83	BRC7E818	—	
		Wired	BRC1E71								
2	Simplified remote controller		—	BRC2A71				—		BRC2A71	BRC2A71
3	Remote sensor (Note 3)		KRCS01-4B	KRCS01-1B		KRCS01-4B	KRCS01-1B				KRCS01-4B
4	Installation box for adaptor PCB		KRP1H98	KRP1B101		KRP4A96	—	KRP1C93	KRP4A93	—	KRP1B101
5	Central remote controller		DCS302C71								
5-1	Electrical box		KJB311AA								
6	Unified ON/OFF controller		DCS301C71								
6-1	Electrical box		KJB212AA								
7	Schedule timer		DST301BA61								
8	External control adaptor for outdoor unit		DTA104A62	DTA104A53		DTA104A61	DTA104A61	DTA104A62	—	DTA104A61	DTA104A53
9	DIII-NET expander adaptor		DTA109A51								
10	Wiring Adapter		KRP1C75			KRC1C74	KRP1C74	KRP1C74	—	KRP1C74	KRC1C75
11	Group Control Adapter		KRP4A73		KRP4A74	KRP4A71	KRP4A71	KRP4A72	KRP4A71	KRP4A71	KRP4A74

C: 3D043022F
C: 3D068551
C: 3D068222A
C: 3TW30729-6

Note:

1. Installation box (No. 4) is necessary for each adaptor marked with an asterisk.
2. Electrical box (No. 5-1/6-1) is required for controller (No. 5/6).
3. When using the BRC2A71, remote sensor KRCS01-1B/4B is needed.
   If the temperature sensor in remote controller can not sense the accuracy temperature of the room, installation of the remote sensor KRCS01-1B/4Binstallation is also recommended.
4. Only 2 fan speeds (H, L) are available.

Building Management System

	Part name			Model No.	Function
intelligent Touch Controller	Basic	Hardware	intelligent Touch Controller	DCS601C71	• Air-Conditioning management system that can be controlled by a compact all-in-one unit.
	Option	Hardware	DIII-Net Plus Adapter	DCS601A72	• Add another DIII-Net line on DCS601C71.
		Software	PPD	DCS002A71	• Power Proportional Distribution.
			Web/Email	DCS004A71	• Monitors and controls the air conditioning system using the Internet and Web browser application on a PC.
			HTTP	DCS007A51	• HTTP interface option for Home Automation System integration.
Communication Line	Interface for use in BACnet®*2			DMS502B71	Interface unit to allow communications between VRV and BMS. Operation and monitoring of VRV systems through BACnet® communications.
	Optional DIII board			DAM411B51	Expansion kit, installed on DMS502B71, to provide 2 more DIII-NET communication ports. Not usable independently.
	Interface for use in LON WORKS®*3			DMS504C71	Interface unit to allow communications between VRV and BMS. Operation and monitoring of VRV systems through LON WORKS® communication.
Contact/Analog signal	Unification adaptor for computerized control			DCS302A72	Interface between the central monitoring board and central control units
	Group Control Adapter			KRP4A71-74	To control the group of indoor units collectively, which are connected by the transmission wiring of remote controller.
	External control adapter for outdoor unit (Must be installed on indoor units.)			DTA104A53, 61, 62	Cooling/Heating mode changeover. Demand control and Low noise control are available between the plural outdoor units.

Note:

★1. BACnet® is a registered trademark of American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).
★2. LON WORKS® is a registered trade mark of Echelon Corporation.

2. Control Devices

2.1 BRC1E71 Navigation Remote Controller (Wired Remote Controller)

2.1.1 Features

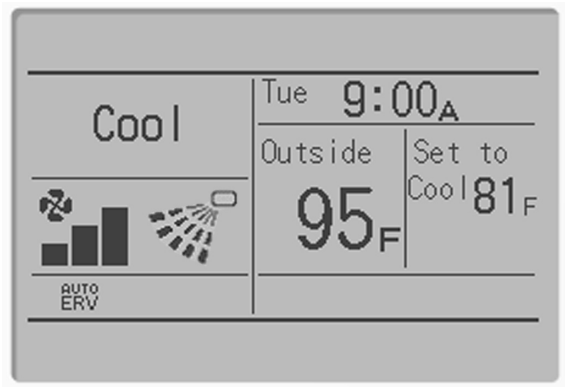
BRC1E71

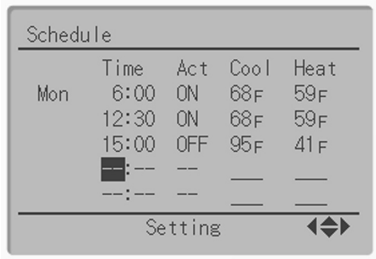
- Clear Display ..... Equipped with backlight and large sized character display and buttons.
- Stylish ..... Basic tone is white and arrow keys are located at the center.
- Simple Operation ..... Simple operation used with arrow keys and menu-driven method.
- Multilingual Display ..... Available for selection of 3 languages
- Other Features ..... Wide variety of functions to meet customer needs such as schedule setting.

■ **Clear Display**

- **Dot matrix display**

  A combination of fine dots enables texts and icons to be displayed smoothly and makes the display of a wide variety of text and illustrations possible.





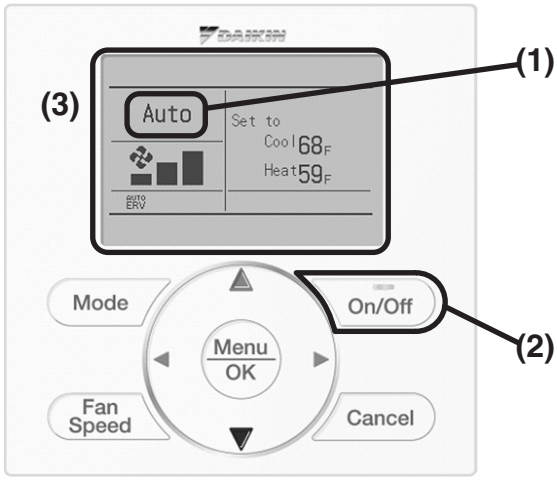
- **Backlight display**

  Newly equipped backlight enables operation in dark room.

■ **Stylish**

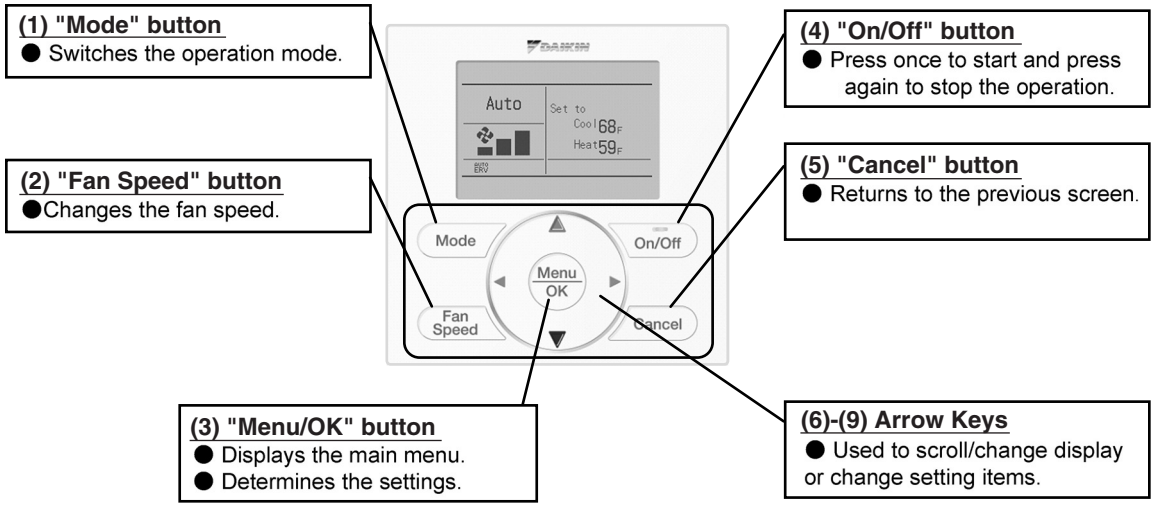
Simple and Functional Design

(1) Large text display (2) Large buttons (3) Backlight (4) No-cover design

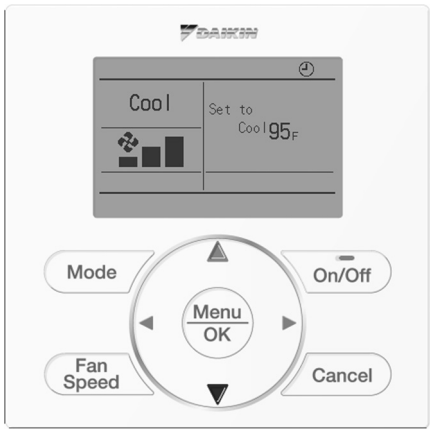


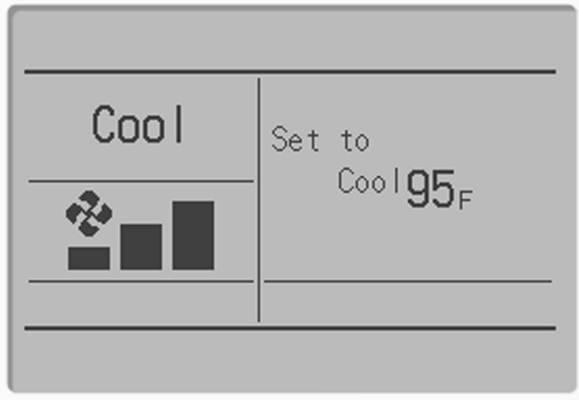
■ **Simple Operation**

Compared to the conventional structure of button allocation for each function, the number of buttons has been decreased (from 15 to 9). Can intuitively handle frequently performed basic operations.



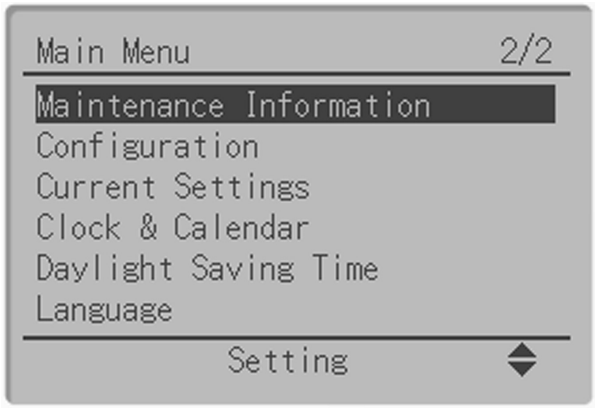
Available for simple operation with arrow keys and menu-driven system.





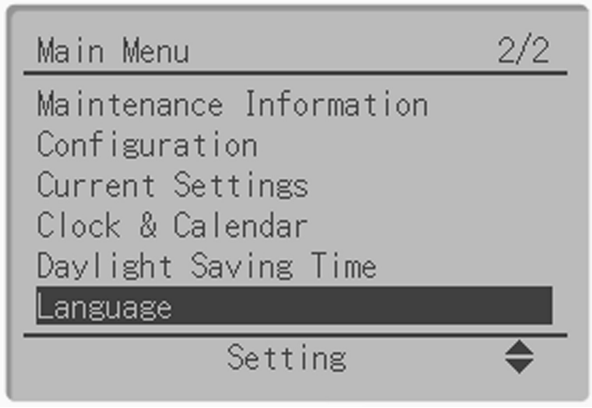
Press the button once to display backlight and make operation available via buttons.

Available for simple operation with arrow keys and menu-driven system.



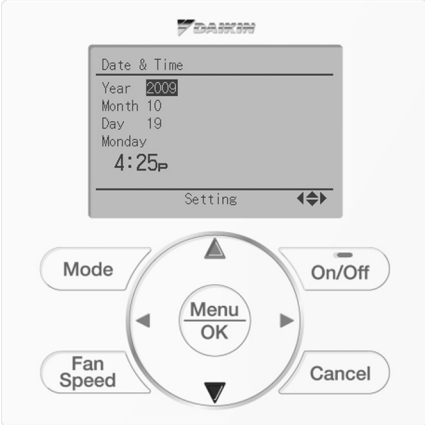
Press "Menu/OK" button to change the screen and then the main menu appears.

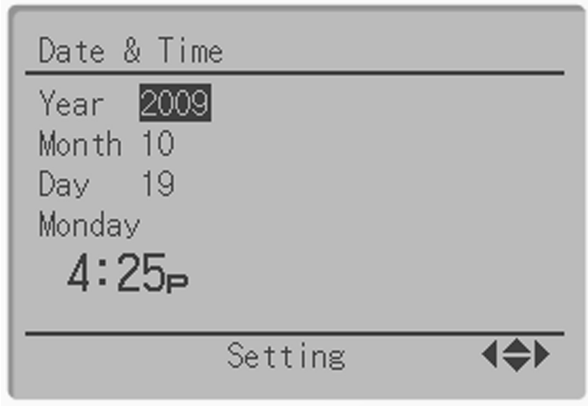
Available for simple operation with arrow keys and menu-driven system.



Select the item you wish to set with direction keys and press "Menu/OK" button at the item you wish to set and the setting entry screen appears.

Available for simple operation with arrow keys and menu-driven system.

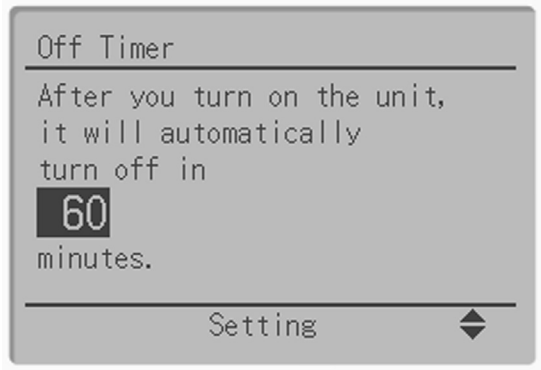




The item you wish to set can be changed with up or down button.

Guide on display

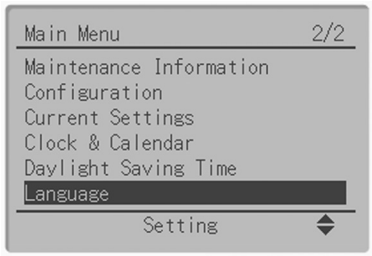
●Example of Setting Screen

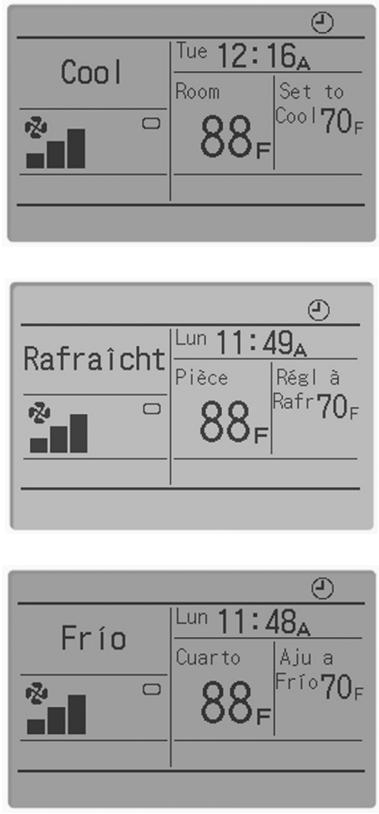


The display gives an explanation of each setting for easier operation.

■ Multilingual Display

- **Available for display in 3 different languages.**
  Always available for switching display by selecting from main menu.





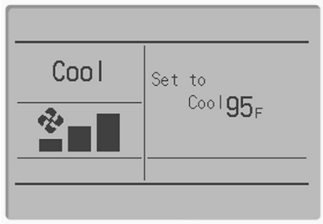
3 languages (English, French, Spanish)

■ **Other Features**

Thanks to full dot LCD, wide variety of contents can be displayed freely.

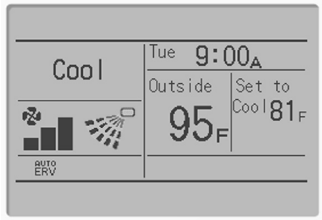
Switching Display

● Simple display
(standard display)



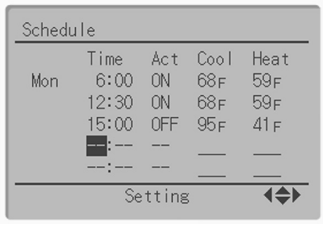
Selectable screen display (Standard/Detailed)

● Display more detailed information
(detailed display)



Schedule function

● Easy to set up weekly schedule timer



2.1.2 Functions

■ **Functions**

Category	Function	BRC1E71
Basic Functions	Drawing display	LCD
	Operation method	Menu selection
	Backlight function	○
Convenient Functions	Clock function (time display)	○
	Display switch function	○ *1
	Keylock function	○
	Schedule (weekly) timer*4	○
Maintenance/Services	Model name display	○ *2
	Contact dealer display	○ *2
	Operation time display	○ *3
	Operational data display	○*3

○: Possible

*1 Used for setting Standard Display mode or Detailed Display mode.
*2-1 When an error occurs, the error code blinks and the contact address and model names appear.
2-2 The contact address must be registered when the controller is installed.
2-3 For some models, model codes are displayed instead of model names.
*3 Can display for some model only.
*4 Setback function

■ **Restrictions**

1. In the case of two remote control system.

		Main		
		BRC1E71	BRC1D71	Wireless BRC4*** BRC7***
Sub	BRC1E71	○	×	×
	BRC1D71	○	○	×
	Wireless BRC4*** BRC7***	×	○	×

○:Connectable ×:Not connectable

◆ Due to the limited power supply capacity, there are some restrictions when controlling 2 remote controllers.
<Common restriction for SkyAir and VRV>
◆ When controlling one indoor unit with 2 remote controllers, the remote controller operated first turns the backlight on.
◆ When controlling 2 remote controllers, the following functions cannot be set with the sub remote controller.
1. Schedule function and Setback temperature function
2. Auto Changeover function by the remote controller
<Restriction for VRV only>
Adaptor for wiring (KRP1C*) or power supply adaptor for indoor unit PCB (X18A or X35A) cannot be used for 2 remote controller system.

2. In the case of centralized remote controller connection.

◆ When connecting a centralized related device (*1), the following functions cannot be set.

1. Schedule function and Setback temperature function
2. Auto Changeover function by the remote controller

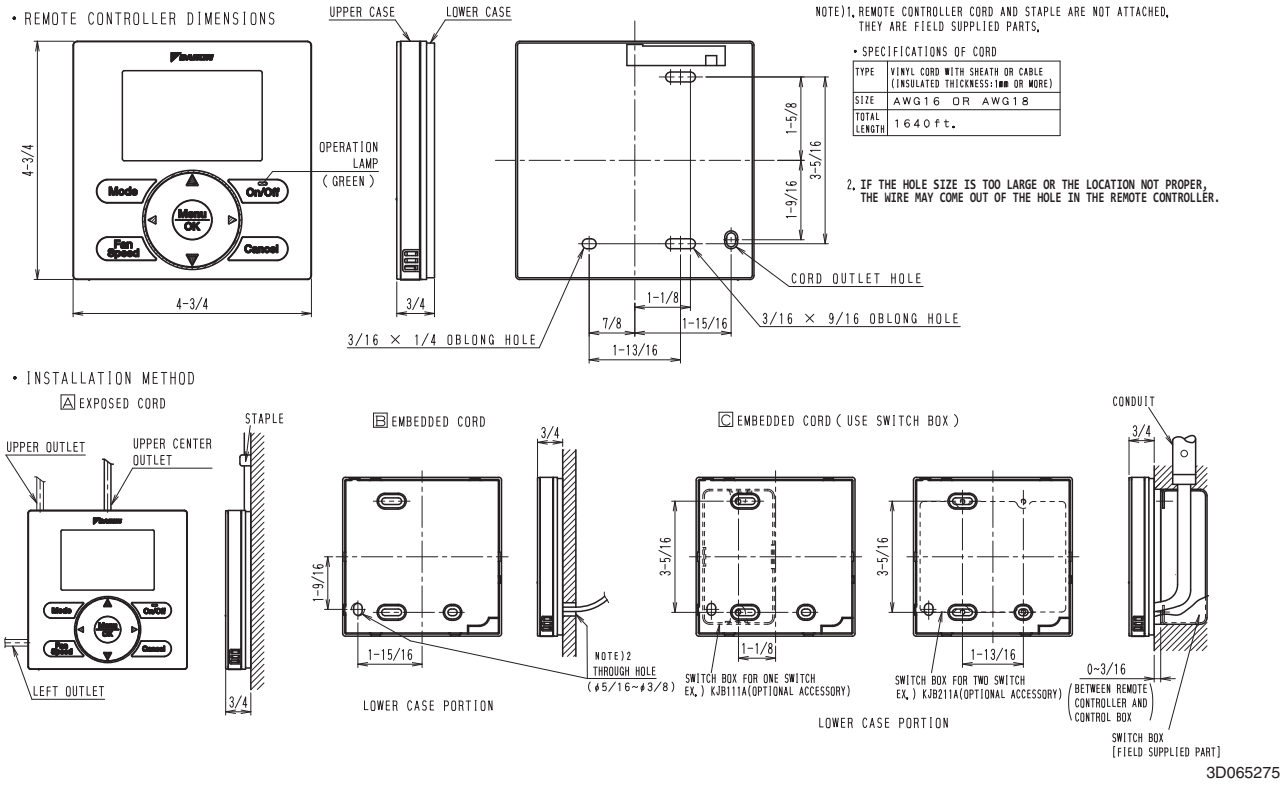
(*1) this means all centralized remote controller.
intelligent Touch Controller [DCS601C71]
intelligent Manager [DAM602A71,72]
BACnet Gateway [DMS502B71]
Central remote controller [DCS302C71]
Unified ON/OFF controller [DCS301C71]
Schedule timer [DST301BA61]
Residential central remote controller [DCS303A71]
Wiring adaptor for electrical appendices [KRP2A5*/6*]
DMS-IF [DMS504C71]

2.1.3 Specifications

		New Remote Controller BRC1E71
Dimension (in.) H × W × D		4’3/4” × 4’3/4” × 3/4”
LCD	Display size (in.) H × W	1’25/32” × 2’13/16”
	Display method	Full dot method (dot 160 × 255)
	Backlight	Yes (Background color: white)
Color		Fresh white
Cover for operation part		No

2.1.4 Dimensions

Unit (in.)



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2.1.5 Applicable Models

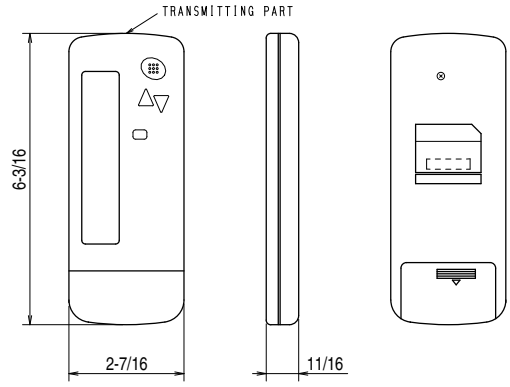
■ **Applicable Models**

	Applicable Indoor unit
VRV	All models that can be connected BRC1D71
SkyAir	All models that can be connected BRC1D71

2.2 BRC4C / 7C / 7E Wireless Remote Controller / Receiver

■ BRC7C812

• REMOTE CONTROLLER DIMENSIONS



• REMOTE CONTROLLER HOLDER INSTALLATION PROCEDURE
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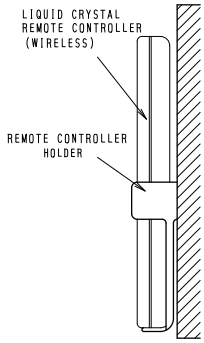
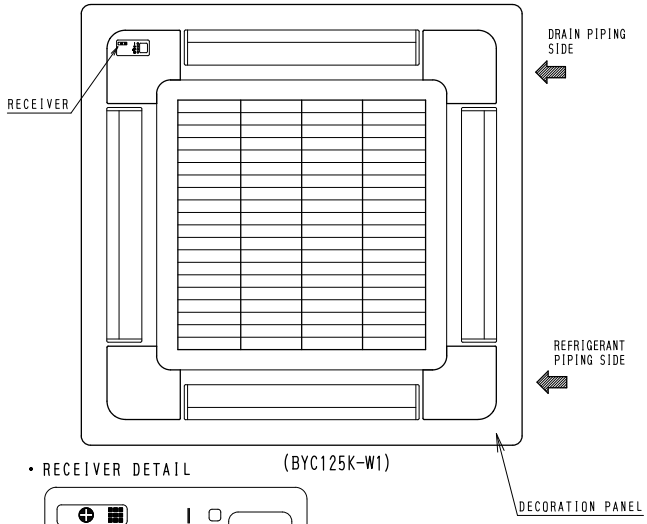
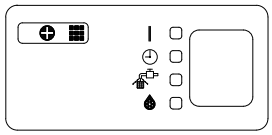


• RECEIVER INSTALLATION PROCEDURE

Unit (in.)



• RECEIVER DETAIL



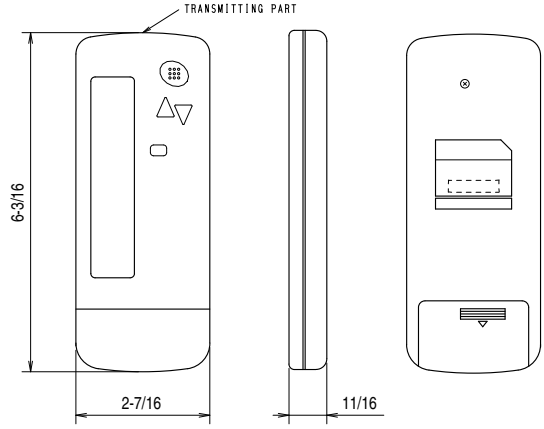
• WIRELESS REMOTE CONTROLLER KIT FOR EACH DECORATION PANEL

WIRELESS REMOTE CONTROLLER KIT	DECORATION PANEL
BRC7C812	BYC125K-W1

C:3D005912D

■ BRC4C82

• REMOTE CONTROLLER DIMENSIONS



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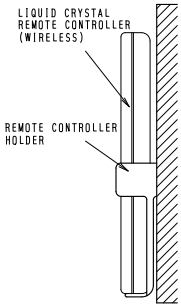
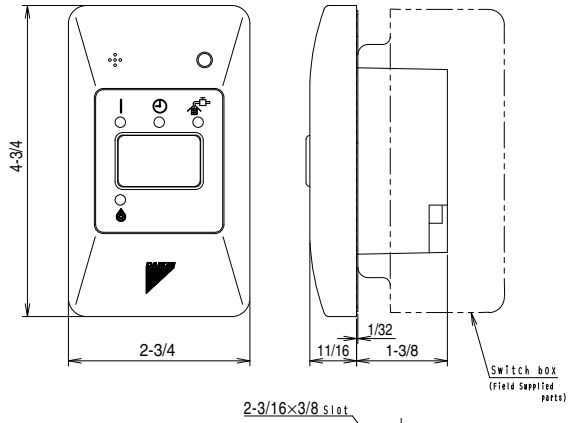
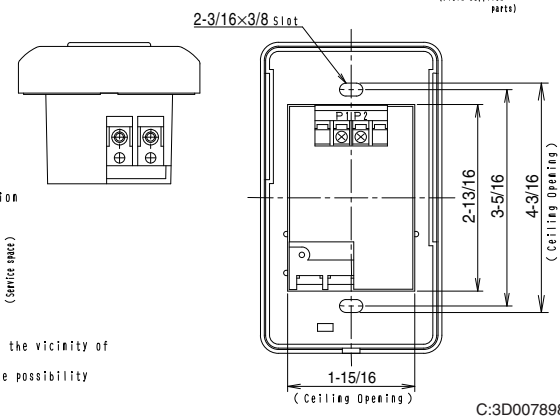


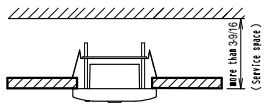
• RECEIVER DETAIL

Unit (in.)





• Service space for ceiling installation



NOTE Do not install more than 3 receivers in the vicinity of one another.
With 4 or more units, there is always the possibility of malfunction.

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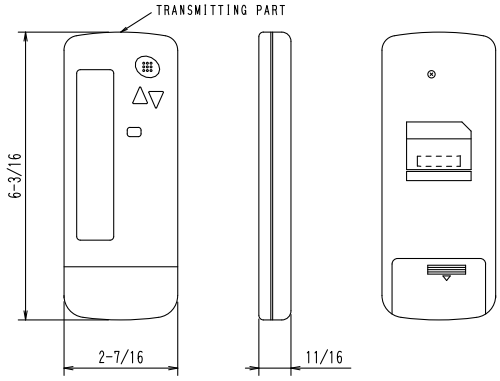
■ BRC7E83

Unit (in.)

• REMOTE CONTROLLER DIMENSIONS



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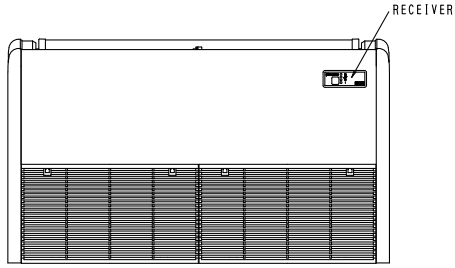

• REMOTE CONTROLLER HOLDER INSTALLATION PROCEDURE
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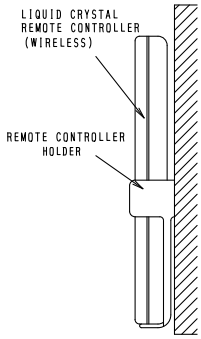

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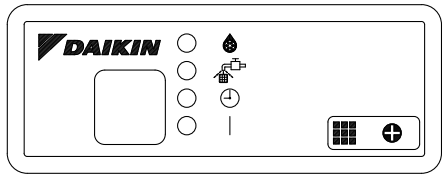

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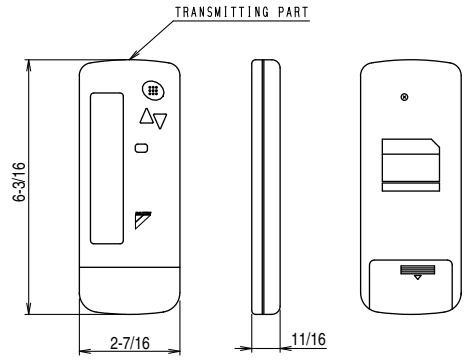
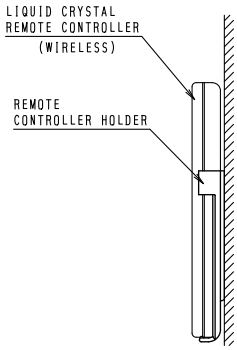
■ BRC7E818

Unit (in.)

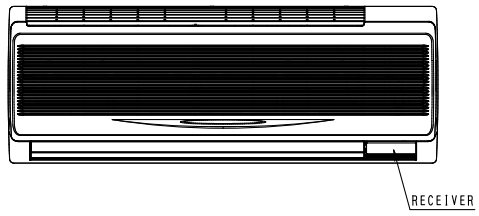
• REMOTE CONTROLLER DIMENSIONS



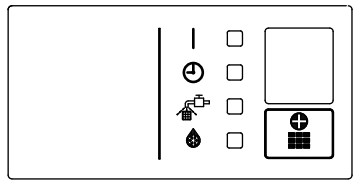
• REMOTE CONTROLLER HOLDER INSTALLATION PROCEDURE
< INSTALLATION TO WALL SURFACE >



• RECEIVER INSTALLATION PROCEDURE



• RECEIVER DETAIL



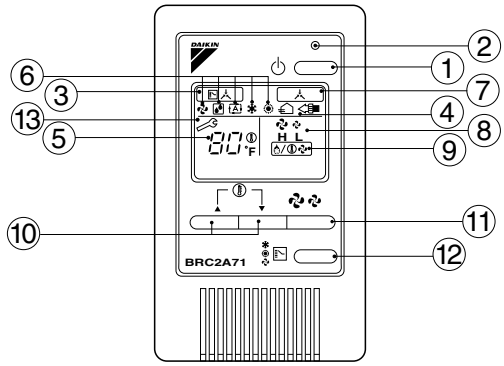
• WIRELESS REMOTE CONTROLLER KIT

WIRELESS REMOTE CONTROLLER KIT	INDOOR UNIT
BRC7E818	FXAQ～MVJU

C:3D034905B

2.3 BRC2A71 Simplified Remote Controller

2.3.1 Name and Function



REMOTE CONTROLLER: NAME AND FUNCTION OF EACH SWITCH AND DISPLAY

①	**ON/OFF BUTTON** Press the button and the system will start. Press the button again and the system will stop.	⑦	**DISPLAY " " (UNDER CENTRALIZED CONTROL)** When this display shows, the system is UNDER CENTRALIZED CONTROL. (This is not a standard specification)
②	**OPERATION LAMP (RED)** The lamp lights up during operation. Blinks in case of stop due to malfunction.	⑧	**DISPLAY " " (FAN SPEED)** This display shows the fan speed: HIGH or LOW.
③	**DISPLAY " " (CHANGEOVER UNDER CONTROL)** It is impossible to changeover heating/cooling with the remote controller when it shows this display. (As for details, see "SETTING OF MASTER REMOTE CONTROLLER" in the installation manual attached to the indoor unit.)	⑨	**DISPLAY " " (DEFROST / HOT START)** Indicates that defrost or hot start (during which the fan is stopped till the temperature of air supply rises enough at the start of a heating operation) is in progress.
④	**DISPLAY " " (VENTILATION/AIR** This display shows that the total heat exchanger and the air cleaning unit are in operation. (These are optional accessories).	⑩	**TEMPERATURE SETTING BUTTON** Use this button for SETTING TEMPERATURE of the thermostat. ▲ ; Each press raises the set temperature by 1 ˚F. ▼ ; Each press lowers the set temperature by 1 ˚F. The variable temperature range is between 60 F and 90 ˚F.
⑤	**DISPLAY " " (SET TEMPERATURE)** This display shows the set temperature. Only given during a cooling or heating operation.	⑪	**FAN SPEED CONTROL BUTTON** Press this button to select the fan speed, HIGH or LOW, of your choice.
⑥	**DISPLAY " " " " " " " " " " (OPERATION MODE)** This display shows current OPERATION MODE. " " is not available with outdoor units specially designed for cooling only. " " is reserved only for outdoor units capable of heat recovery.	⑫	**OPERATION MODE SELECTOR BUTTON** Press this button to select OPERATION MODE.
		⑬	**DISPLAY " " (MALFUNCTION)** Indicates malfunction and blinks if the unit stops operating due to malfunction. (As for details, see "TROUBLE SHOOTING" in the operation manual attached to the outdoor unit.)

For the sake of explanation, all indications are shown in the figure above contrary to actual running situations.

3P146204

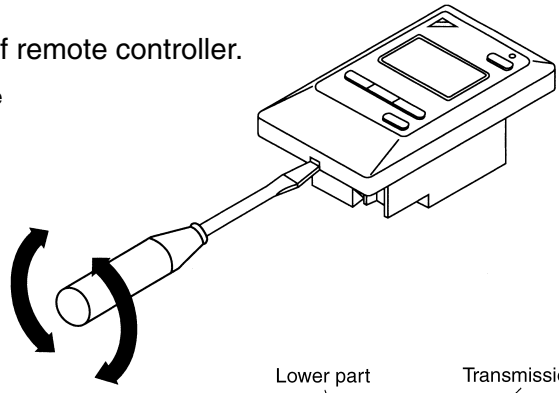
2.3.2 Installation

1. Remove the upper part of remote controller.

Insert a minus screwdriver into the slot between the upper and the lower part of remote controller.

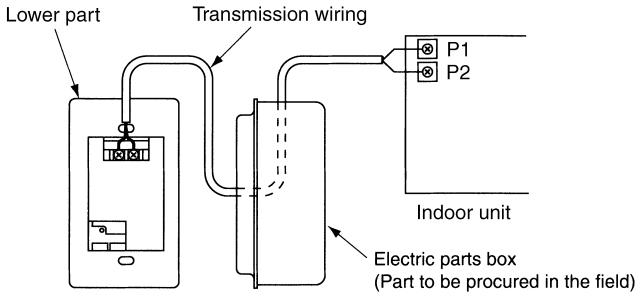
NOTE

1. Do not directly touch the PC board with your hand.



2. Wire the indoor unit.

Connect terminals P1 and P2 on the rear of the lower part of remote controller to terminals P1 and P2 on the indoor unit. (Terminals P1 and P2 have no polarity.)



NOTES

1. The electric parts box and wiring for connection are not included.
2. When wiring, run the wiring away the power supply wiring in order to avoid receiving electric noise (external noise).
3. When wiring, refer to the wiring diagram of indoor unit (attached to indoor unit) as well.

WIRING SPECIFICATION

Wiring type	Sheathed wire (2 wire)
Size	AWG18 or AWG16

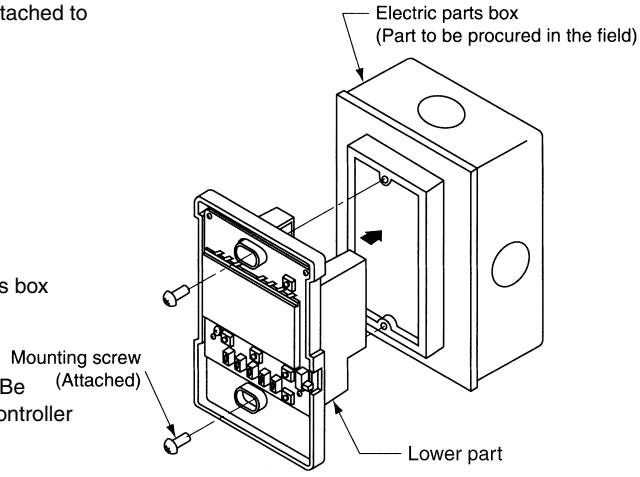
3. Fasten the remote controller.

Attach the lower part of remote controller to the electric parts box (part to be procured in the field).

NOTE

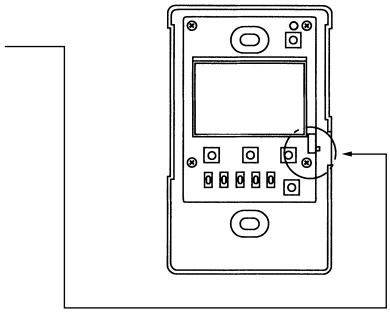
Choose the flattest place possible for the mounting surface. Be careful not to distort the shape of the lower part of remote controller by over-tightening the mounting screws.

For the electric parts box to be procured in the field, use optional accessories KJB111A.



4. Initial setting

Change the MAIN/SUB changeover switch setting as described below.
If controlling one indoor unit with two remote controllers, set one remote controller to "MAIN." and the other to "SUB."



Main Remote Controller (Factory Set)

Sub Remote Controller

3P146205-1

NOTES

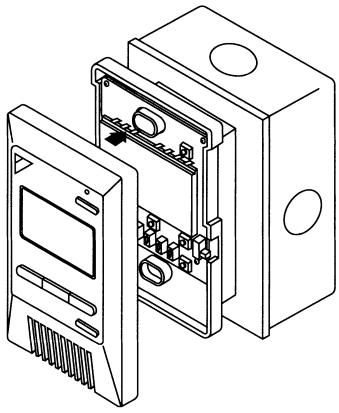
- If controlling with one remote controller, be sure to set it to "MAIN."
- Set the remote controller before turning power supply on.

"88" is displayed for about one minute when the power supply is turned on, and the remote controller cannot be operated in some cases.

5. Reattach the upper part of remote controller.

NOTE

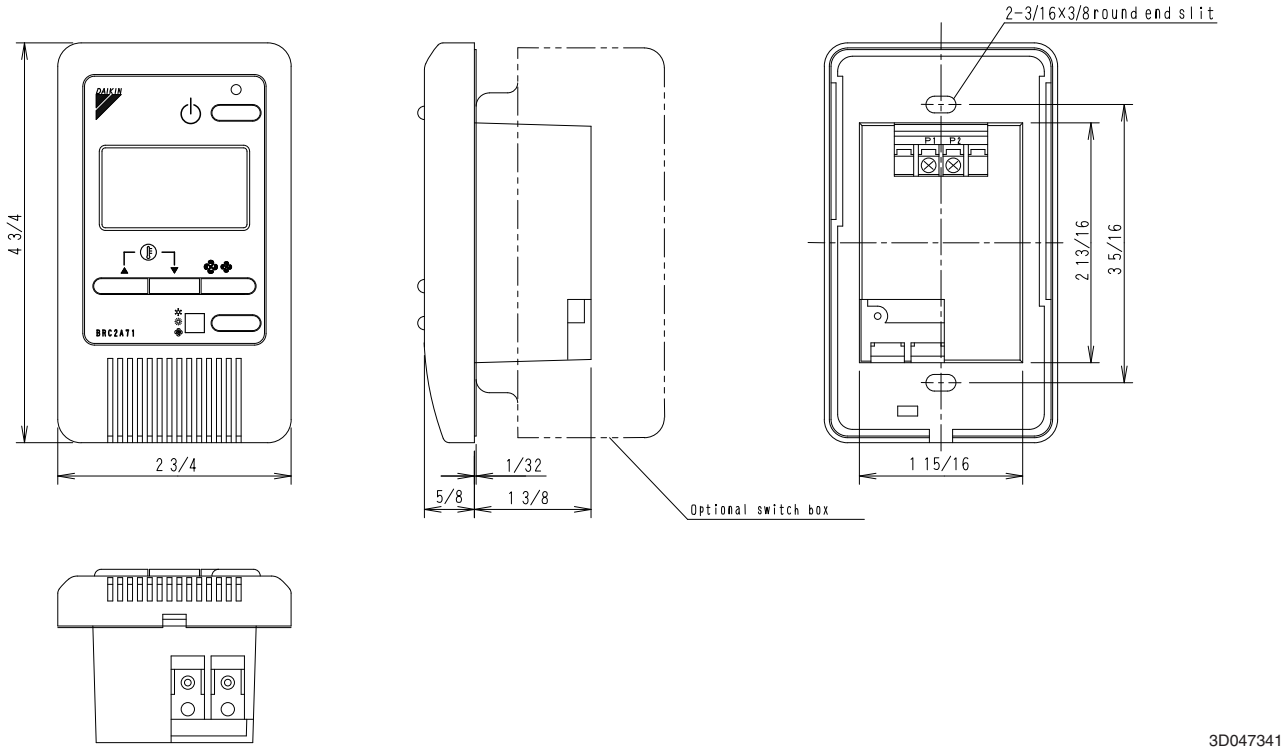
1. Do not directly touch the PC board with your hand.



3P146205-2

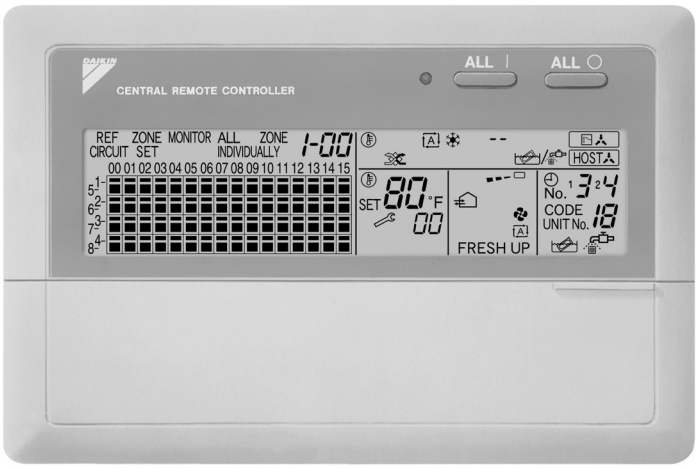
2.3.3 Dimensions

Unit (in.)



3D047341

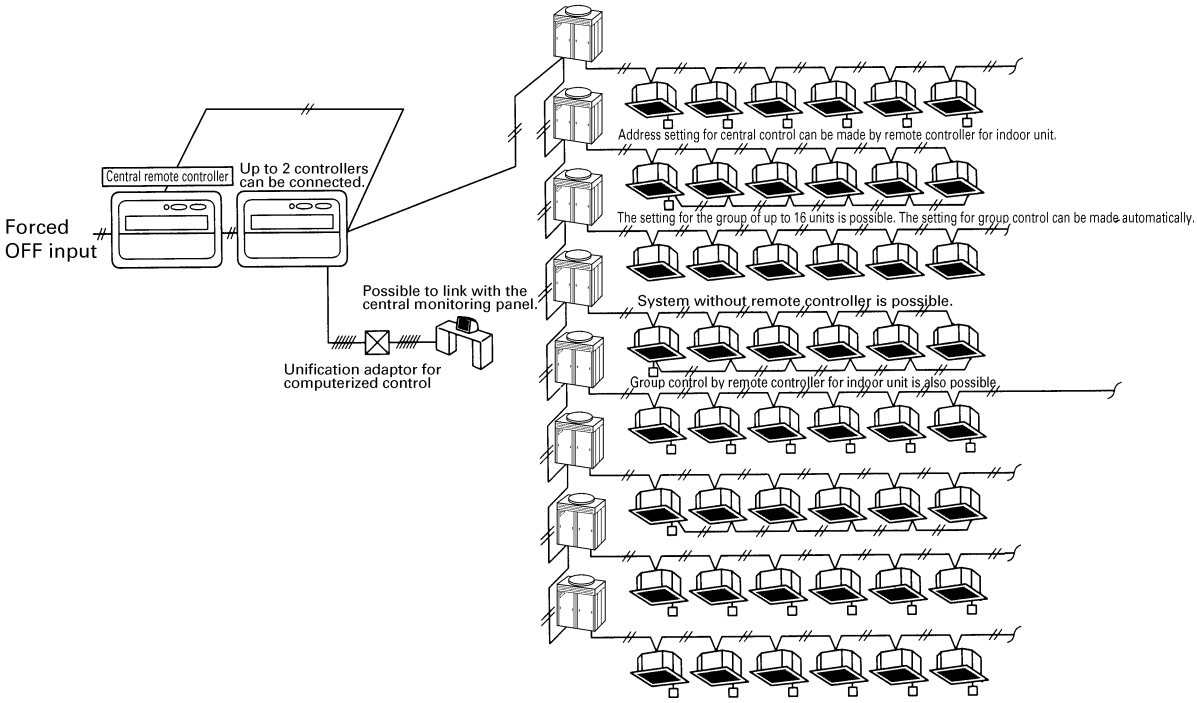
2.4 DCS302C71 Central Remote Controller



- You can connect up to 64 groups of indoor units (max. 128 units); let's you operate or monitor ON/OFF, temperature setting, etc., by zone individually or together.
- Up to 2 units are connectable within 1 system (Up to 4 units in case of the double central control mode)
- Executes zone control for up to 64 zones and is designed for operation efficiency.
- Error contents are displayed in code; maintenance and inspections can be quickly carried out.
- 1 schedule timer and up to 4 unified on/off controllers can be connected to a single unit, and you can freely extend the central control system according to building size and purpose.
- Applicable wiring methods include bus and star in addition to series wiring

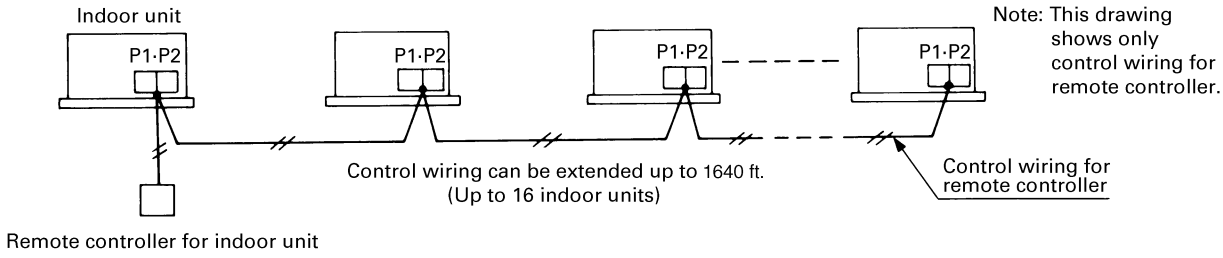
2.4.1 System Configuration

System Outline


Central remote controller
Up to 2 controllers can be connected.
Forced OFF input
Possible to link with the central monitoring panel.
Unification adaptor for computerized control
Address setting for central control can be made by remote controller for indoor unit.
The setting for the group of up to 16 units is possible. The setting for group control can be made automatically.
System without remote controller is possible.
Group control by remote controller for indoor unit is also possible.

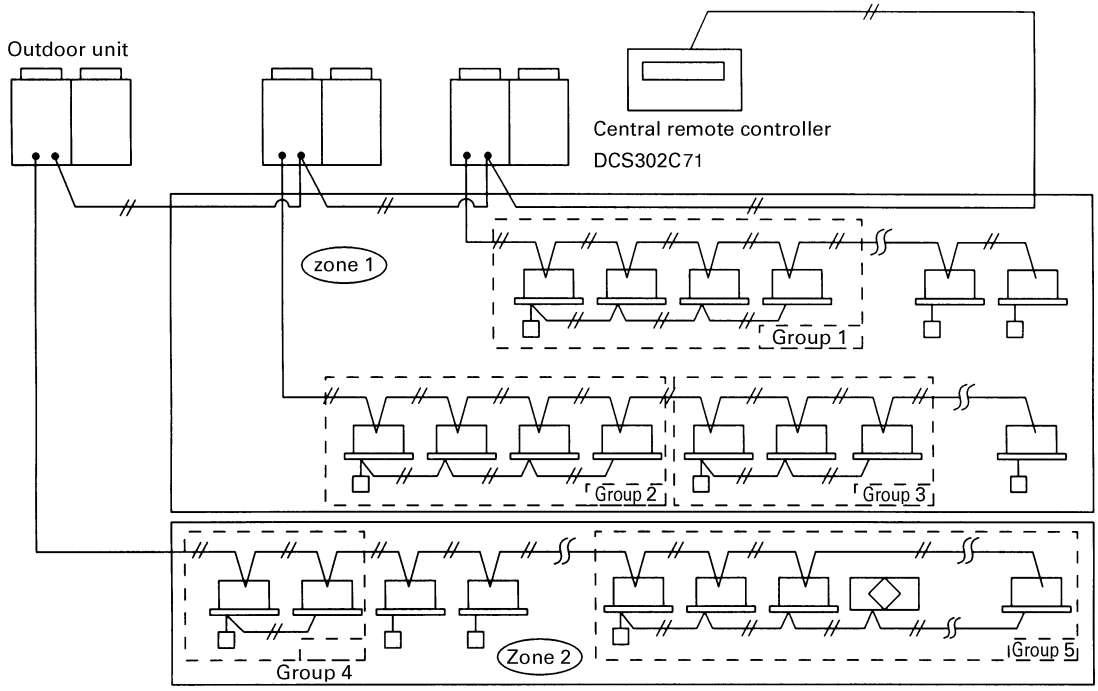
System Configuration (Group / Zone Control)

■ Group control


Indoor unit
P1·P2
P1·P2
P1·P2
P1·P2
Note: This drawing shows only control wiring for remote controller.
Control wiring can be extended up to 1640 ft.
(Up to 16 indoor units)
Control wiring for remote controller
Remote controller for indoor unit

- The group means the indoor units connected by the same control wiring for remote controller (connected to terminal P1 and P2) and all the unit in group have “the same setting” and “the same operation”.
- The indoor units in the group are controlled by the remote controller for indoor unit.
- The number of indoor units in one group is up to 16 units.

■ Zone control



- The zone means the indoor units connected by the same control wiring for central remote controller (connected to terminal F1 and F2) and all the unit in zone have “the same setting”.
- The zone control of the indoor unit is operated by the central remote controller.
- From 1 up to 64 zones can be controlled by the central remote controller.
- The number of groups you can set in one zone is from 1 up to 64 groups.
- Up to 16 units can be set in one group, and up to 64 groups (up to 128 units) can be connected.

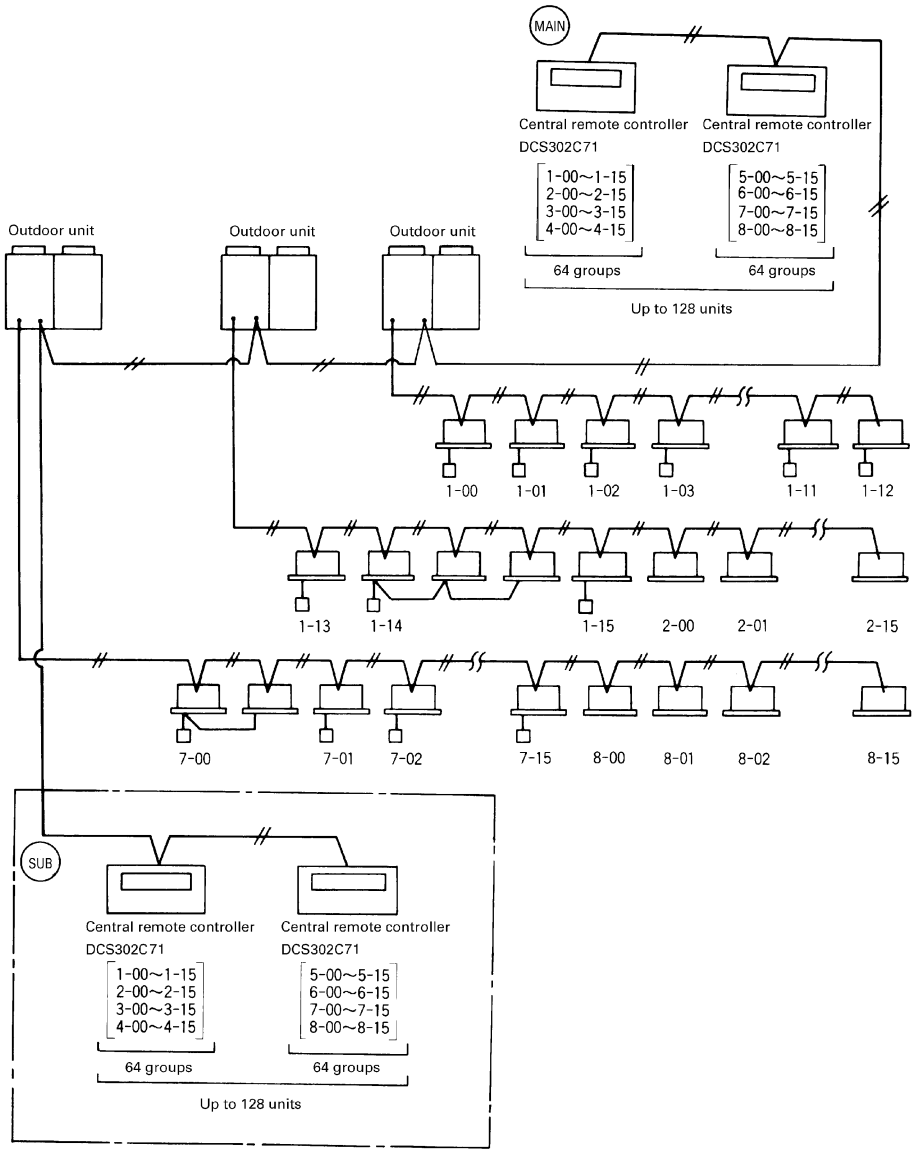
System Configuration (Control by 2 central remote controllers)

- Up to 128 indoor units can be connected in one system.
- 2 or 4 central remote controllers are required. It is possible to control the same unit from 2 locations.
- Up to 16 unified ON/OFF controllers can be connected. (8 controllers × 2 locations)
- One schedule timer can be connected.

Notes:

1.Electrical power should be supplied to each central remote controller. (Single phase 100~240V)

2.When you control by 2 central remote controllers, be sure to set SS3 by the initial setting.



(★) When you control by 2 central remote controllers. (Last command priority)

Notes:

The following setting cannot be made by the sub side. Be sure to set by the main side.

- Operation code setting

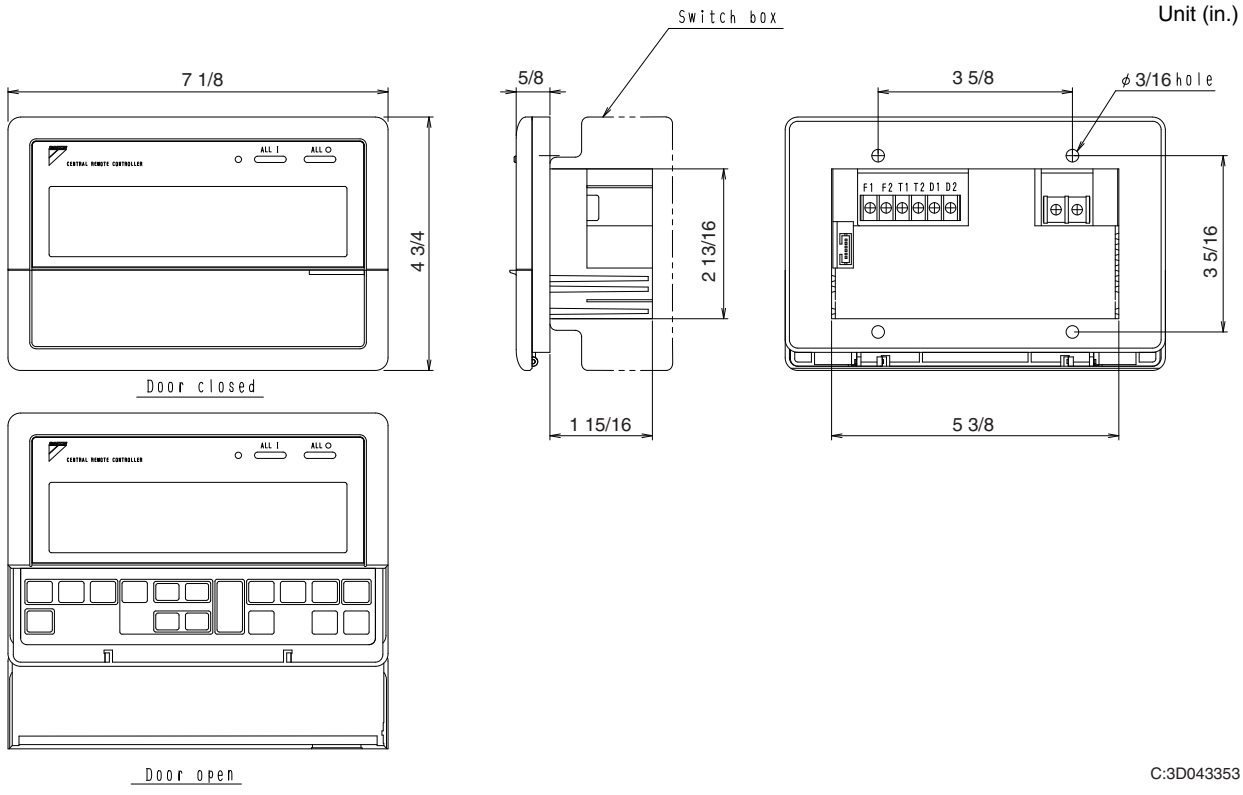
2.4.2 Specifications / Dimensions

Specifications

	DCS302C71
Power supply voltage / frequency	AC100~240V ±10% 50/60Hz
Power consumption	Max. 8W
Setting data backup	Non-volatile memory (Data preserved semi-permanently)
Effects of instantaneous power failure	No effect for 20 mili-sec. or less
Forced OFF input Operation on the local side cannot be carried out during forced OFF input.	■ No-voltage normal open contact ■ Micro-current contact capable of handling 16VDC and approx. 10mA. ■ Max. 492 ft cable length
Power supply for schedule timer	Power can be supplied to schedule timer. (Max. 1 unit)
Operating ambient temperature /humidity condition	-5~40°C, 95% RH or less (no condensation)
Size (width × height × depth)	7 1/8×4 3/4×2 9/16 exposed portion of front panel: 5/8 (Unit: Inch)
Machine Weight (Mass)	Approx. 0.95 lbs

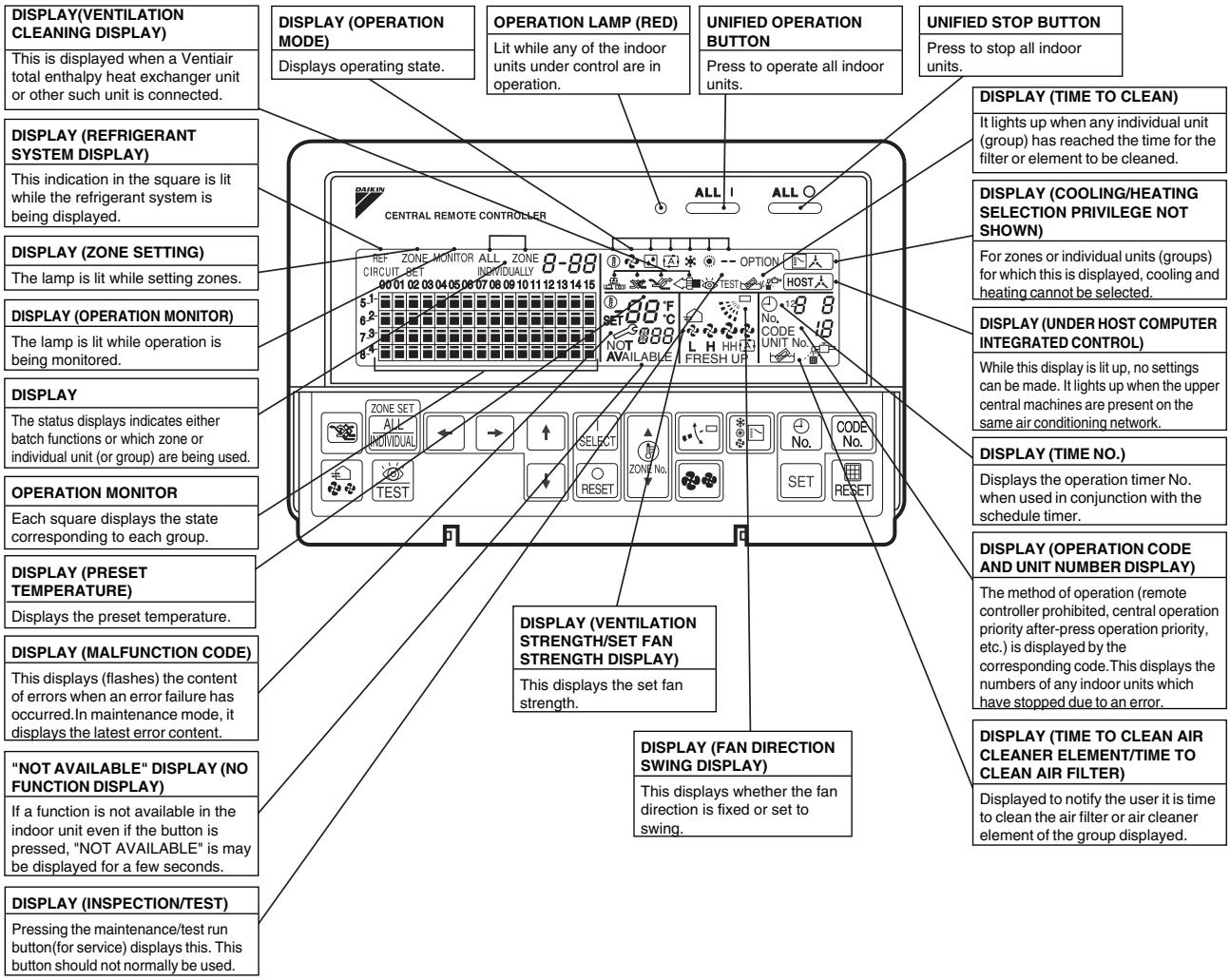
Dimensions

DCS302C71

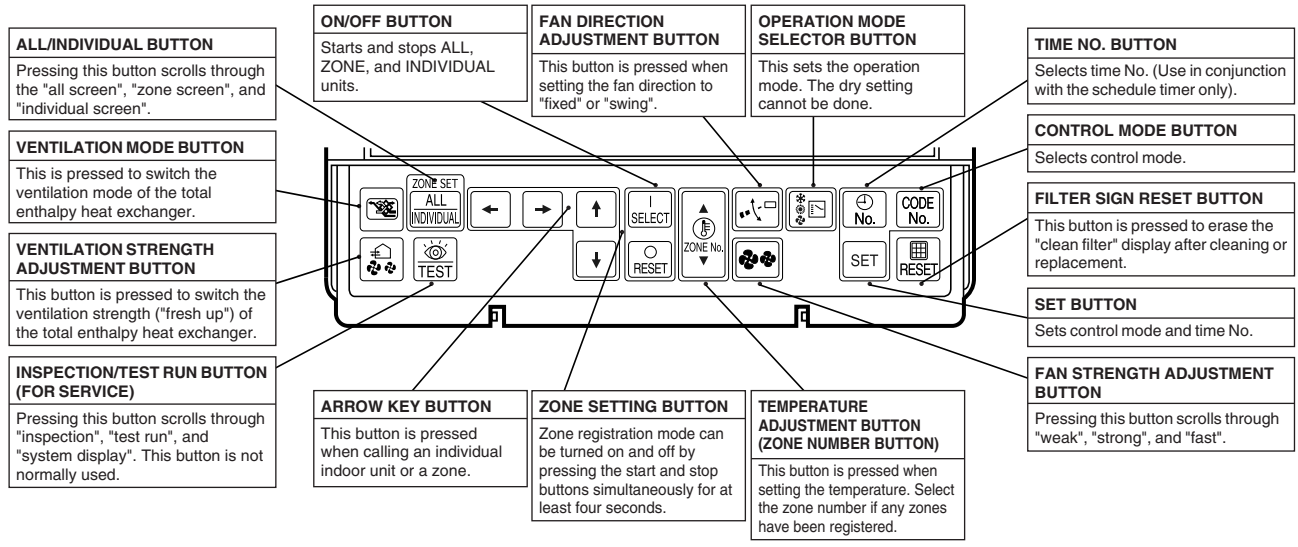


2.4.3 Names and Functions of Operating Part

■ Display part DISPLAY (OPERATION MODE) Displays operating state.


DISPLAY(VENTILATION CLEANING DISPLAY)
This is displayed when a Ventiair total enthalpy heat exchanger unit or other such unit is connected.
DISPLAY (OPERATION MODE)
Displays operating state.
OPERATION LAMP (RED)
Lit while any of the indoor units under control are in operation.
UNIFIED OPERATION BUTTON
Press to operate all indoor units.
UNIFIED STOP BUTTON
Press to stop all indoor units.
DISPLAY (TIME TO CLEAN)
It lights up when any individual unit (group) has reached the time for the filter or element to be cleaned.
DISPLAY (REFRIGERANT SYSTEM DISPLAY)
This indication in the square is lit while the refrigerant system is being displayed.
DISPLAY (COOLING/HEATING SELECTION PRIVILEGE NOT SHOWN)
For zones or individual units (groups) for which this is displayed, cooling and heating cannot be selected.
DISPLAY (ZONE SETTING)
The lamp is lit while setting zones.
DISPLAY (OPERATION MONITOR)
The lamp is lit while operation is being monitored.
DISPLAY (UNDER HOST COMPUTER INTEGRATED CONTROL)
While this display is lit up, no settings can be made. It lights up when the upper central machines are present on the same air conditioning network.
DISPLAY
The status displays indicates either batch functions or which zone or individual unit (or group) are being used.
DISPLAY (TIME NO.)
Displays the operation timer No. when used in conjunction with the schedule timer.
OPERATION MONITOR
Each square displays the state corresponding to each group.
DISPLAY (PRESET TEMPERATURE)
Displays the preset temperature.
DISPLAY (OPERATION CODE AND UNIT NUMBER DISPLAY)
The method of operation (remote controller prohibited, central operation priority after-press operation priority, etc.) is displayed by the corresponding code.This displays the numbers of any indoor units which have stopped due to an error.
DISPLAY (MALFUNCTION CODE)
This displays (flashes) the content of errors when an error failure has occurred.In maintenance mode, it displays the latest error content.
DISPLAY (VENTILATION STRENGTH/SET FAN STRENGTH DISPLAY)
This displays the set fan strength.
"NOT AVAILABLE" DISPLAY (NO FUNCTION DISPLAY)
If a function is not available in the indoor unit even if the button is pressed, "NOT AVAILABLE" is may be displayed for a few seconds.
DISPLAY (FAN DIRECTION SWING DISPLAY)
This displays whether the fan direction is fixed or set to swing.
DISPLAY (TIME TO CLEAN AIR CLEANER ELEMENT/TIME TO CLEAN AIR FILTER)
Displayed to notify the user it is time to clean the air filter or air cleaner element of the group displayed.
DISPLAY (INSPECTION/TEST)
Pressing the maintenance/test run button(for service) displays this. This button should not normally be used.
CENTRAL REMOTE CONTROLLER
ALL
ALL
OPTION
HOST
TEST
NOT AVAILABLE
FRESH UP
ZONE SET
ALL
INDIVIDUAL
SELECT
RESET
ZONE No.
TEST
No.
CODE No.
SET
RESET

■ Control Section


ALL/INDIVIDUAL BUTTON
Pressing this button scrolls through the "all screen", "zone screen", and "individual screen".
ON/OFF BUTTON
Starts and stops ALL, ZONE, and INDIVIDUAL units.
FAN DIRECTION ADJUSTMENT BUTTON
This button is pressed when setting the fan direction to "fixed" or "swing".
OPERATION MODE SELECTOR BUTTON
This sets the operation mode. The dry setting cannot be done.
TIME NO. BUTTON
Selects time No. (Use in conjunction with the schedule timer only).
VENTILATION MODE BUTTON
This is pressed to switch the ventilation mode of the total enthalpy heat exchanger.
CONTROL MODE BUTTON
Selects control mode.
FILTER SIGN RESET BUTTON
This button is pressed to erase the "clean filter" display after cleaning or replacement.
VENTILATION STRENGTH ADJUSTMENT BUTTON
This button is pressed to switch the ventilation strength ("fresh up") of the total enthalpy heat exchanger.
SET BUTTON
Sets control mode and time No.
INSPECTION/TEST RUN BUTTON (FOR SERVICE)
Pressing this button scrolls through "inspection", "test run", and "system display". This button is not normally used.
FAN STRENGTH ADJUSTMENT BUTTON
Pressing this button scrolls through "weak", "strong", and "fast".
ARROW KEY BUTTON
This button is pressed when calling an individual indoor unit or a zone.
ZONE SETTING BUTTON
Zone registration mode can be turned on and off by pressing the start and stop buttons simultaneously for at least four seconds.
TEMPERATURE ADJUSTMENT BUTTON (ZONE NUMBER BUTTON)
This button is pressed when setting the temperature. Select the zone number if any zones have been registered.
ZONE SET
ALL
INDIVIDUAL
SELECT
RESET
ZONE No.
TEST
No.
CODE No.
SET
RESET

2.4.4 Description of Functions

Individual Screen, all Screen, Zone Screen

This controller can perform operations in the individual screen, all screen, or zone screen.

- Individual screen
  The individual screen is used when performing group operations.
- All screen
  The all screen is used when performing operations for all units at once.
- Zone screen
  The zone screen is used when performing zone operations.

Basic Functions

	Descriptions of outline
Individual/Zone control	Up to 64 groups (Max. 128 units and max. 16 units per group) of indoor units and HRV units can be controlled by individually or by zone.
Unified ON/OFF	ON/OFF can be set for each zone, and can be controlled simultaneously for entire system by push button or by contact signal from outside.
Malfunction code display	The status of each group is always displayed, such as ON/OFF, error, etc. If the error occurs, it displays the contents of error by malfunction code through the self-diagnosis function.
Connection of unification adaptor for computerized control	By connecting the unification adaptor for computerized control (option), it can be linked with the central monitoring panel and etc. by contact signal, which enables you to operate ON/OFF simultaneously or monitor the operating status.
Remote control acceptance/rejection	It is possible to restrict the function of local remote controller. (Only ON operation rejection, or ON/OFF operation rejection)
2 central controllers	By connecting two central remote controllers, the same air-conditioner can be controlled from 2 locations (By tenant or administration office.)

Zone Control Functions

	Descriptions of outline
Zone control	The zone function is a function to control one or more group of air-conditioner, and the operation setting such as ON/OFF etc. can be made by zone.
Up to 64 zones	Up to 64 zones (64 groups for each zone) can be set. However, the group setting spreading over the plural zone cannot be set.
Zone register	When the power is supplied first time, each group is registered in each respective zone. If you can simply register the several groups in the same zone by switch, so that you can have simultaneous operation of the units in that zone immediately. (The operation of temperature setting and etc. is also controlled by zone simultaneously.)
Zone setting	By adding the zone setting function (Zone “0”) from the central remote controller, you can set the same setting for all the zone registered by single operation.
ON/OFF control of zone	For example, if there are three groups in one room and if you register these three groups as one zone, you can operate these three groups simultaneously by single operation (ON/OFF, temperature setting etc.). You still can operate each group individually by local remote controller.
Maintaining zone setting	Even if the power is turned off, the zone configurations set are maintained semi-permanently. (saved in non-volatile memory)
Cool/Heat changeover by zone	The cool/heat changeover can be made by zone. However, it is required to have a master group for Cool/Heat changeover in that zone.
Batch operation	The same setup is possible at one operation to all the groups registered on the "All" screen.
No local remote controller	Even if there is no local remote controller, you can still perform the same operation. There is no problem even if no remote controller is connected. (However, in this case, each one air-conditioner consists of one group.)
Combination with other controllers	You can also combine with a unified ON/OFF controller and a schedule timer. (Refer to the system configuration for details.)
Connection to central monitoring panel	You can also combine with an Interface for use in BAC net® and a data station in order to connect to the central monitoring panel. A parallel interface can also be connected.

Cool/Heat Changeover and Eligibility Setting

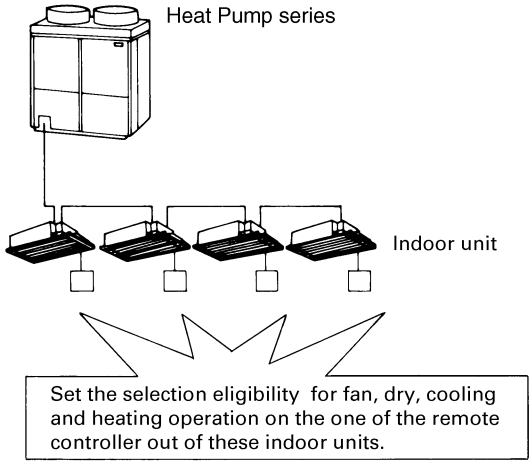
	Descriptions of outline
Possible control	The operation mode of the outdoor unit can be changed by the local remote controller or by the central remote controller. (For test operation, change setting of cool/heat selector switch of the outdoor unit.)
Remote controller acceptance/rejection	You can set the remote controller acceptance/rejection on the central remote controller by the local remote controller.
"NOT AVAILABLE" DISPLAY (NO FUNCTION DISPLAY)	If a function is not available in the indoor unit even if the button is pressed, "NOT AVAILABLE" is may be displayed for a few seconds.

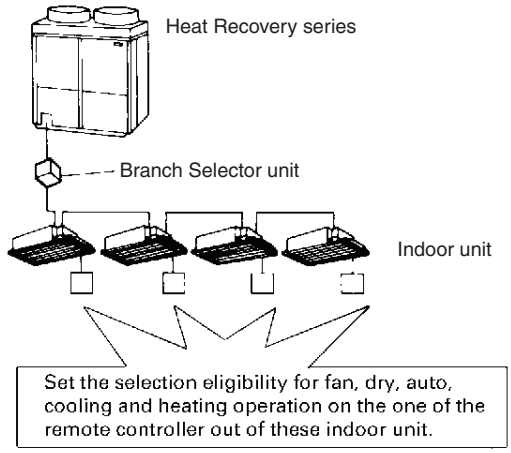
Note:

Refer to the next page for the selection of cool/heat mode (eligibility for cool/heat changeover).

■ **Cool/heat Selection Eligibility Setting by Remote Controller for Indoor Unit**

The outdoor unit of can freely be selected the operation mode (fan, dry, auto [Heat Recovery only], cooling or heating) by the remote controller for indoor unit. However, you have to set the selection eligibility for fan, dry, cooling and heating operation on the one of the remote controller out of the indoor units connected to the outdoor unit. For Heat Recovery series and the function unit (for heat recovery), if 2 or more indoor units are connected to one Branch Selector unit, you have set the selection eligibility for fan, dry, auto, cooling and heating operation on the one of the remote controller out of the indoor units connected to the Branch Selector unit.
(Only the remote controller having the selection eligibility can change the operation mode.)


Heat Pump series
Indoor unit
Set the selection eligibility for fan, dry, cooling and heating operation on the one of the remote controller out of these indoor units.

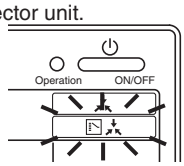

Heat Recovery series
Branch Selector unit
Indoor unit
Set the selection eligibility for fan, dry, auto, cooling and heating operation on the one of the remote controller out of these indoor unit.

■ **Setting method of the selection eligibility for cool/heat**

1. Preparation

■ When turning on the power first time, "CHANGEOVER UNDER CONTROL" sign blinks.

When you set;

1	Continue to push Operation switch for about 4 seconds. sign blinks on all the indoor units connected to the outdoor unit or Branch Selector unit. 

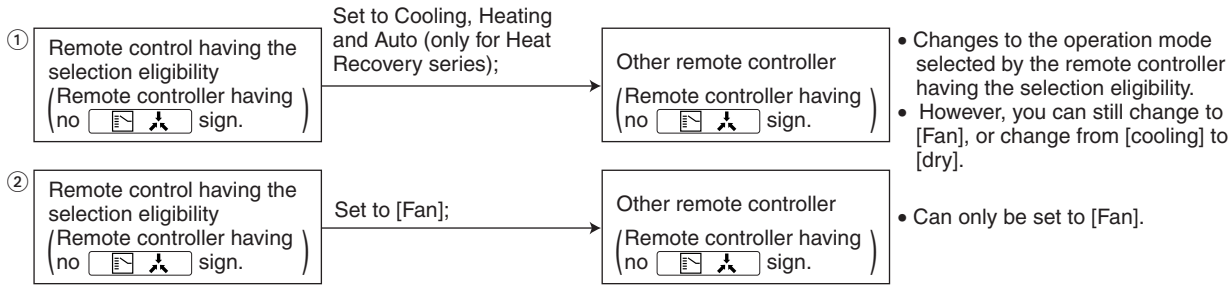
2. Selection Eligibility Setting

2	Push Operation switch of the remote controller, which you want to set the selection eligibility. This completes the setting procedure. Cool/heat selection eligibility is set for that remote controller, and sign goes off. still blinks on all other remote controllers.

3. Operation mode changeover

3	Push Operation switch of remote controller having the selection eligibility (The remote controller not displaying sign) several times to select the desired operation mode. [Fan], [Dry], [Auto](only for Heat Recovery series),[Cooling] and[Heating] mode are selected each time you push the [Operation switch]. Operation mode of other remote controllers, which has no selection eligibility, is also switched automatically.

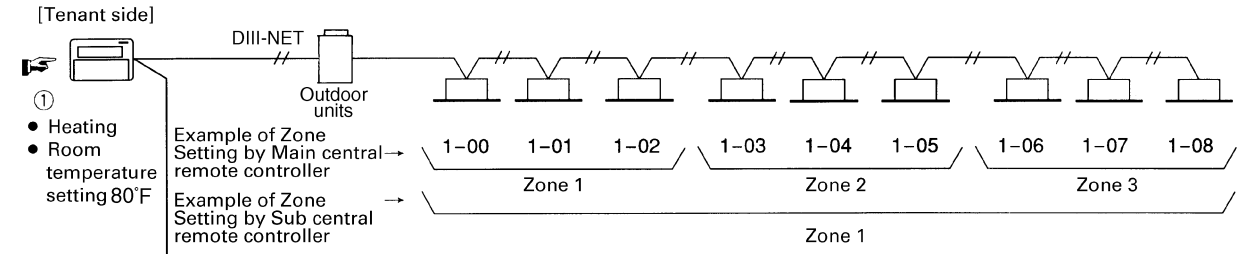
■ **Description of operation and its function**


①
Remote control having the selection eligibility (Remote controller having no sign.)
Set to Cooling, Heating and Auto (only for Heat Recovery series);
Other remote controller (Remote controller having no sign.)
• Changes to the operation mode selected by the remote controller having the selection eligibility.
• However, you can still change to [Fan], or change from [cooling] to [dry].
②
Remote control having the selection eligibility (Remote controller having no sign.)
Set to [Fan];
Other remote controller (Remote controller having no sign.)
• Can only be set to [Fan].

★It is also possible to set the selection eligibility on the wireless remote controller.
It is not possible to set to "Dry" with the Central Remote Controller.

Control with Two Central Remote Controllers

The central remote control equipment is newly designed to "B" type, which has been added with a new control function for 2 central remote controllers. However, be sure that the relation between Main/Sub of the central remote controller is different from those of local remote controllers.



<Main central remote controller>
[Functions]
- Zone registration
- ON/OFF by zone simultaneously (Refer to "Cautions")
- Operation control code (Last command priority, Central priority, etc.)
- Room temperature setting
- Operation mode
- Filter sign monitoring and reset
- Timer No. registration for each zone (When schedule timer is used.)
- Operating status monitoring by group
- Refrigeration circuit display
- Test operation
- Individual setting (When local remote controller is not used.)

<Sub central remote controller>
[Functions]
- Zone registration
- ON/OFF by zone simultaneously (Refer to "Cautions")
- Room temperature setting
- Operation mode
- Filter sign monitoring and reset
- Time No. setting for each zone (When schedule timer is used.)(Note 1)
- Operating status monitoring by group
- Refrigeration circuit display
- Test operation
- Individual setting (When local remote controller is not used.)

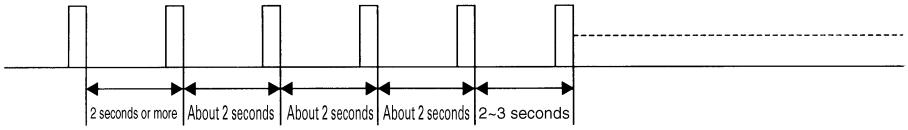
Note:
Understand that if the timer No. is registered by the sub-central remote controller, it will be overidden by the Main remote controller setting upon operation. [Timer mode acceptance for local remote controller (mode no. 8,9,18, and 19)]

<Explanation of the above figure>
If you operate the central remote controller in the sequence of ① and ②, the indoor unit is set for cooling / temperature setting 75°F.
However, the display of zone setting of the master remote controller remains at heating / temperature setting at 80°F.

<Cautions>
- ■ Operation code cannot be set by the sub central remote controller.
- ■ Combined zone operation can only be set by zone registration of the main central remote controller.
- ■ Both main and sub central remote controller are operated by a last priority command for the functions other than the above.
  However, the display on the central remote controller cannot be changed by each other. (On the display for the group, you can monitor the present operation status.)

Sequential Start

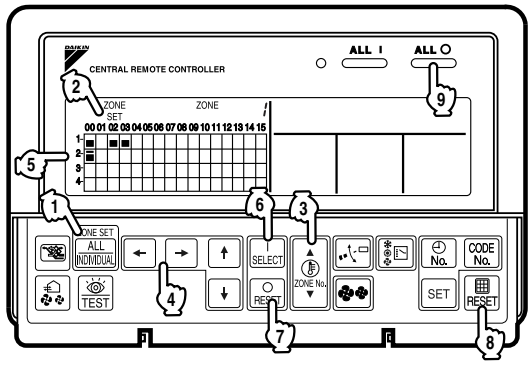
<Operation command from central control equipment>



Each unit operates in sequence. For example, if you set the simultaneous operation by the central remote controller, which controls 1-00 ~ 4-15 and 5-00 ~ 8-15 groups, two outdoor units start simultaneously.

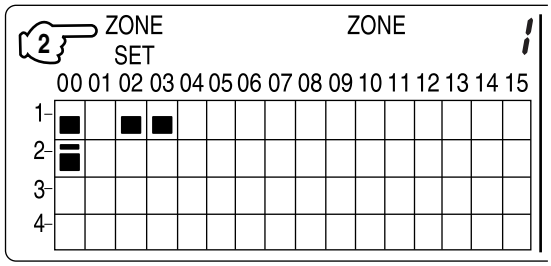
Registering Zone

It is possible to set multiple groups as one zone and control each zone separately.
No zones are registered when the unit is shipped from the factory.
Zone registration can be done in the individual screen, all screen, or zone screen.



Registration

1. **Pressing the "ALL/INDIVIDUAL" button for four seconds. Displays ZONE SET.**
   Zone Number 1 will be displayed, and if there are any groups already registered in the displayed zone, a " ■ " will light up on the operation monitor.
2. **Select the Zone Number to be registered using the "ZONE NUMBER" button.**
   Keeping the button pressed down will move it rapidly.
3. **" ▬ "to the group you wish to register using the arrow keys.**
   Keeping the button pressed down will move it rapidly.
4. **Press the "SELECT" button to register that group to the zone.**
   The " ■ " display lights up on all the selected units.
   Pressing the "RESET" button removes the group from that zone, and " ■ " goes off.
   Repeat steps 3 and 4 until all the units you wish to register to the zone have been added.



   In this example, a screen is shown with units 1-00, 1-02, 1-03, and 2-00 registered to Zone Number 1.
5. **Repeat steps 2 to 4 to register to the next zone.**
6. **Once zone registration is complete, press the "ALL/INDIVIDUAL" button to turn off "ZONE SET" display and return to the individual screen.**
   The display returns to the normal screen if nothing is done for one minute when in zone registration mode.

(NOTE)

- It is impossible to register one group to several different zones.
  If this is done, the last zone registered to will be valid.

Batch deletion of zone registration

1. ☞9 Pressing the "ALL ◯ " for at least four seconds while ☞8 pressing the "FILTER SIGN RESET" button when ☞2 "ZONE SET" is displayed will delete all zone registrations.

The zone registrations for all units will be lost.

Zone setting

Set the screen of [Zone 0] on the display, and if you set the following mode, you can set to all the registered zone on the central remote controller by one operation.

- Operation mode
- Control mode
- Room temperature setting
- Time No.

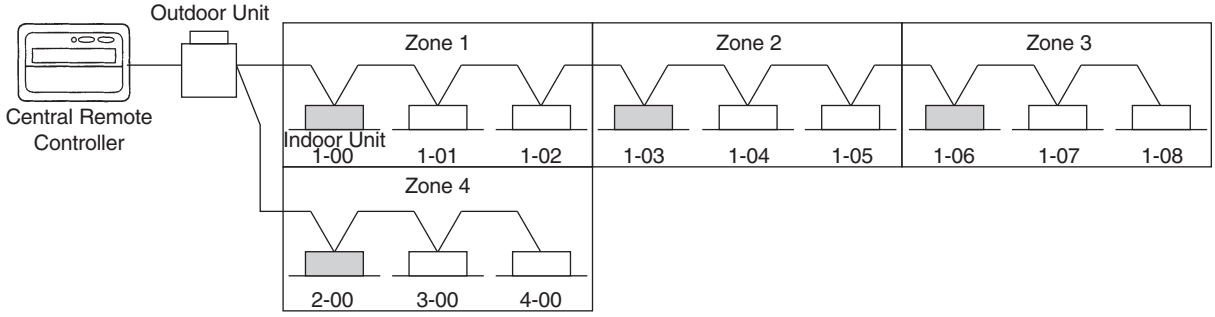
Display of "NOT AVAILABLE"

If indoor units are not available for functions subject to control even when attempting to operate these functions from DCS302C71, the system will display this "NOT AVAILABLE" message.
This message is displayed for a period of approximately two seconds. However, if any button corresponding to functions not available while the "NOT AVAILABLE" is displayed, it will be displayed for a period of another approximately two seconds.

Monitor in zone unit

Operating and monitoring the system even in group or zone unit has become enabled from the DCS302C71.
Monitoring in zone unit is conducted taking an indoor unit with a lower address within the zone as the Main Indoor Unit.

For monitoring the zone settings:The following screens are displayed.



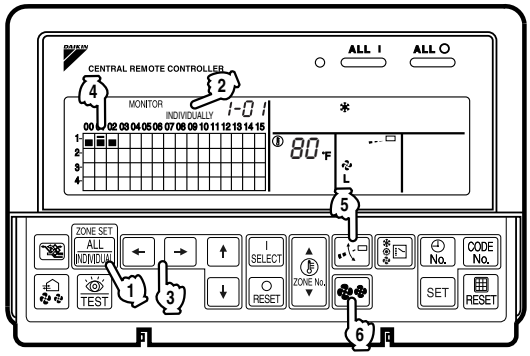
	Main Indoor Unit	Operation Code Timer No.	Temp. Display	Operation Mode
Zone 1	1-00	1-00	1-00	1-00
Zone 2	1-03	1-03	1-03	1-03
Zone 3	1-06	1-06	1-07	1-07
Zone 4	2-00	2-00	N/A	N/A

If the system is operated on the Zone screen, one and the same setting will be made on all indoor units registered with the zone.
On the Zone screen, ventilation mode is only monitored. In order to change ventilation mode, be sure to use the Individual screen.

On the Batch screen, operating and monitoring is also enabled, thus monitoring an indoor unit with a lower address within the scope of control.

Changing the Fan Direction and Fan Strength

This changes the fan direction and strength settings in the air conditioner.
Changing the fan direction and strength is done in the individual screen.



[Registration]

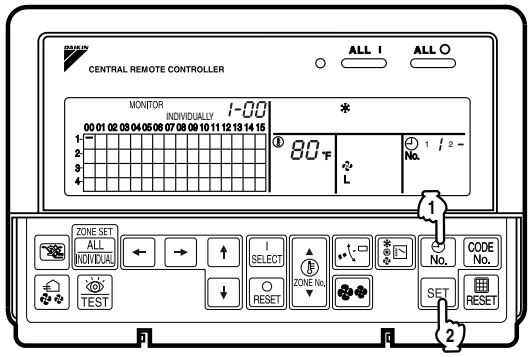
1. **Press the "ALL/INDIVIDUAL button" to enter the individual screen.**
   The unit will enter the individual screen automatically if nothing is done for one minute.
2. **Using the arrow keys, move the " " to select the units to fan direction adjustment or fan strength adjustment.**
   Keeping the button pressed down will move it rapidly.
3. **Press the "FAN DIRECTION ADJUSTMENT" button.**
   This sets "fixed" or "swing" for the fan direction.
   Press the "FAN STRENGTH ADJUSTMENT" button.
   Pressing this button scrolls through " L ", " H " and " HH ".
   Depending on the indoor unit, only " L " and " H " may be available.

The functions included in the indoor units may vary. Pressing a button for a function which is not available will cause "NOT AVAILABLE" to be displayed.

Timer Number Setting

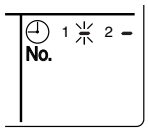
(Only when used with the schedule timer)

Using this together with the schedule timer makes it possible to set on and off times four times a day.
4 times of ON/OFF time can be setup per day. Because, two settings of ON/OFF time are possible to one Schedule Timer and two Schedule Timers can be registered into a Central Remote Controller.

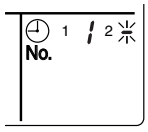


[Registration]

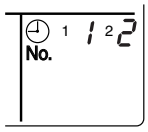
1. ☞1 **Pressing the "TIMER No." button causes the number set for timer number 1 to blink.**
   If no timer setting has been made "–" will be displayed. Select the desired timer number by pressing the ☞1 "TIMER NO." button.



2. ☞2 **Once the desired timer number is displayed, press the "SET" button.**
   Press the ☞2 "SET" button within 10 seconds after the timer number is displayed.
   The display will return to how it was after 10 seconds.
   The display for timer number 1 will stop blinking and then timer number 2 will start blinking.



3. ☞1 **Select the desired timer number by pressing the "TIMER NO." button.**
   Once the desired timer number is displayed, ☞2 press the "SET" button.
   The display for timer number 2 will stop blinking.
   The " No. " display will disappear after 3 seconds.
   Select "–" in the timer number when you do not wish to set a timer number.
   It is possible to set only one timer number.
   (The times for turning the unit(s) on and off twice a day can be set with a single timer number.)



- **Timer number setting**
  Group control: select the unit in the individual screen and set the timer number.
  Batch control: set the timer numbers for all connected units.
  Zone control: set the timer numbers for all zone-registered units.
  Call up the zones which you wish to set in the zone screen and set the timer numbers.
- **Since the timer number will be set to after-press priority, the timer number in the last screen set will be valid for the connected units.**
  Example 1
  Setting timer number 1 for unit 1-00 to "1" and timer number 2 to "2" in the individual screen and then setting timer number 1 to "3" and timer number 2 to "4" in the batch screen causes the timer numbers for all units to be set, so timer number 1 for unit 1-00 will be "3" and timer number 2 will be "4".
  Example 2
  To prevent leaving units on, timer number 1 is set to "5" in the batch screen.
  Setting timer number 1 in zone number 1 to "–" in the zone screen after that will change the timer number for zone number 1, so the setting to prevent leaving the units on will be lost for zone number 1 only.
  If a timer number is set incorrectly by accident, redo the setting in the desired screen.
- **What happens when the timer number on time and off time are set to the same time**
  When the on time and off time are set to the same time for the same timer number, operation does not change.
  When the on time and off time are set to the same time for different timer numbers, the off time is given priority.
  When using timer operation, make sure the times do not overlap when setting the program of the schedule timer.

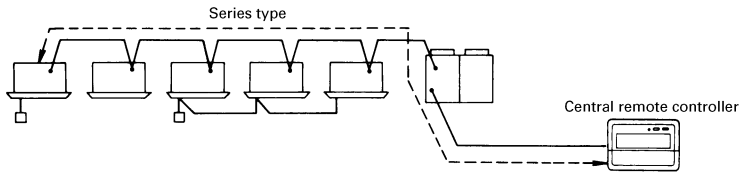
2.4.5 Wiring Instructions

Wiring instructions

For control wiring of DIII-NET, you can select from the following 3 types of wiring methods.

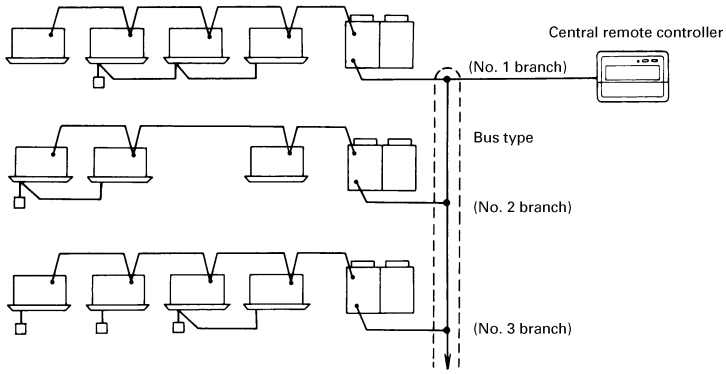
1. Series method :

Wiring is connected by a single line from the central controller.



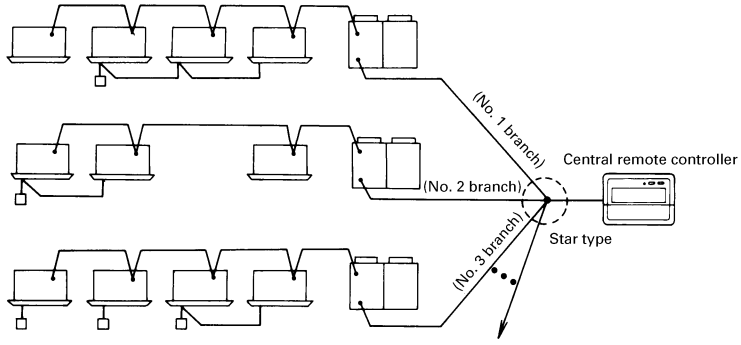
2. Bus method :

Up to 16 branches is possible. Never diverge the sub-branches from the branch line.



3. Star method :

Up to 16 branches is possible. Never diverge the sub-branches from the branch line.



Specifications of Transmission Wiring

Be sure to use either 2-core sheathed vinyl cord or cable as mentioned below. The size of wire should be selected in the range of AWG 18 or AWG 16.

<Length of control wiring>

Between central remote controller and air-conditioner

Maximum extension : 3280 ft, Total length : 6560 ft (★)

★ When you have branches, be sure the total length includes all the branches.

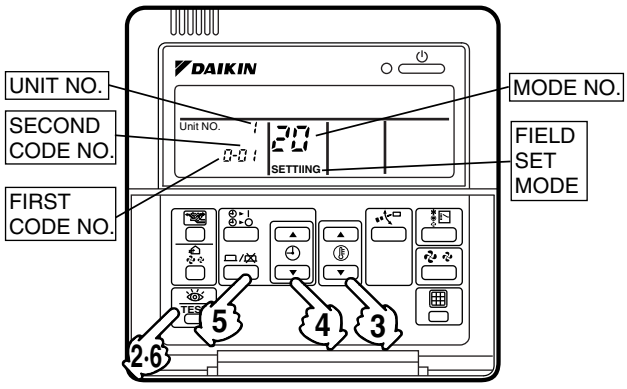
2.4.6 Instructions for Initial Setting

Group No. Setting for Central Control Equipment

Group No. should be set for each group by the remote controller for indoor unit, when you operate the system with central remote controller and unified ON/OFF controller. (For the same control group, set only one of the unit.)

■ **Remote controller for indoor unit**

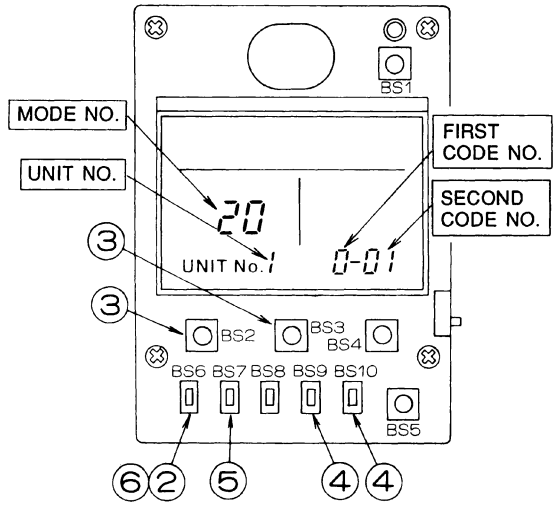
1. Turn ON the power of the indoor unit and central remote controller.
   (Unless the power is ON, no setting can be made.)
   Check that the installation and electrical wiring are correct before turning the power supply ON.
   (When the power supply is turned ON, all LCD appear once and the unit may not accept the operation for about one minute with the display of "88".)
2. While in the normal mode, hold down the " TEST " button for a minimum of 4 seconds.
   The remote controller will enter the FIELD SET MODE.
3. Select the MODE No. "00" with the " ▲▼ " button.
4. Use the " ▲▼ " button to select the group No. for each group.
   (Group numbers increase in the order of 1-00, 1-01, ... 1-15, 2-00, ... 4-15.)
5. Press " ▭ " to set the selected group No.
6. Press " TEST " to return to the NORMAL MODE.



■ **Simplified remote controller**

■ Group No. setting by simplified remote controller.

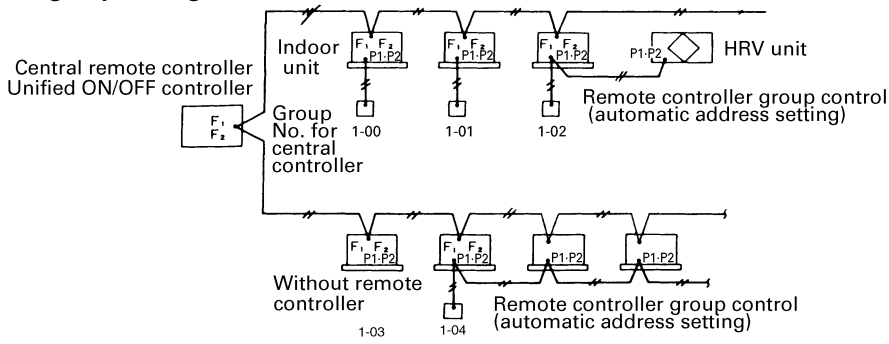
1. Remove the cover of remote controller.
2. While in normal mode, press the [BS6] BUTTON (field set) to enter the FIELD SET MODE.
3. Select the mode No. [00] with [BS2] BUTTON (temperature setting ▲) and [BS3] BUTTON (temperature setting ▼).
4. Select the group No. with [BS9] BUTTON (set A) and [BS10] BUTTON (set B). (Group Nos. increase in the order of 1-00, 1-01.....1-15, 2-00,.....4-15. However, the unified ON/OFF controller displays only group No. set within the range of control.)
5. Press [BS7] BUTTON (set/cancel) to set group No.
6. Press [BS6] BUTTON (field set) to return to the NORMAL MODE.



<Cautions>

- Even in the system without remote control, connect the remote controller once to set group No. for central control equipment and remove the remote controller after setting.
- When you set the group No., be sure to supply the power to the central remote controller, the unified ON/OFF controller and the indoor unit.

<Example of group setting>



Cautions

When the power is supplied, all the display appears once on the remote controller and then the display changes to [88] for about one minute and during that time the remote controller does not function. However, this is not a malfunction of remote controller.

Control Mode Setting by Remote Controller (Field Setting)

The control mode defines the function of local remote controllers to handle various types of control and applications. Function can be defined by conditions and combinations of local remote control operations such as ON/OFF etc. (See table below.)

Operation can always carried out from the central remote controller. (Except when connected to the central monitoring panel.)

■ Description of Control Mode

The following 5 operation control modes and 20 modes combined with temperature and operation mode setting by the remote controller are set and display by the control mode of 0 through 19.

Remote Control Rejection

For when you want to turn on/off using central remote controller only.
(On/off cannot be carried out by remote controller.)

Remote Controller Off Only Accepted

For when you want to turn on only by the central remote controller, and turn off only by local remote controller.

Central Priority

For when you want to turn on only by the central remote controller, and during the set time, turn on/off freely by local remote controller.

Individual Priority (Last Command Priority)

For when you want to turn on/off by both central remote controller and local remote controller.

Remote Controller Permission Timer

For when you want to turn on/off by local remote controller during set time, but you do not want to start operation from the central remote controller at the programmed time of system start.

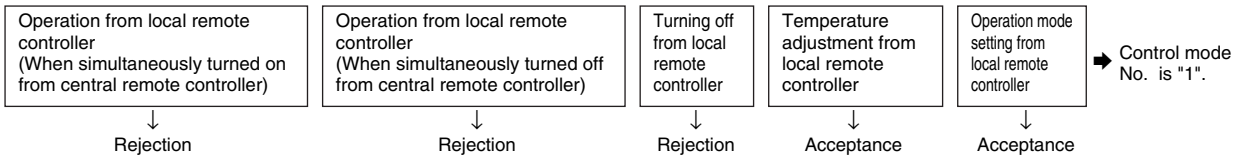
Note:

The control mode consists of numbers 0 through 19, but only 0 through 9 are usually set.

2.4.7 Selection of Control Mode No.

Select whether to accept or reject operations by local remote controller such as Turning on/off, temperature adjustment and operation mode setting respectively, and decide the control mode No. the right side of the table below.

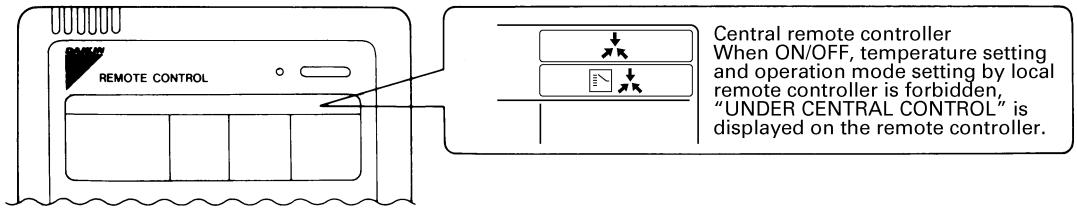
(Example)


Operation from local remote controller (When simultaneously turned on from central remote controller)
Operation from local remote controller (When simultaneously turned off from central remote controller)
Turning off from local remote controller
Temperature adjustment from local remote controller
Operation mode setting from local remote controller
Control mode No. is "1".
Rejection
Rejection
Rejection
Acceptance
Acceptance

Control mode	Operation from remote controller					Control mode No.
	ON		OFF	Temperature adjustment	Operation mode setting	
	Simultaneous operation, Individual operation and Timer operation is turned "ON" by central controllers	Simultaneous operation and timer operation is turned "OFF" by central controllers				
Remote controller rejection	Rejection (example)	Rejection (example)	Rejection (example)	Rejection	Acceptance	0
					Rejection	10
				Acceptance (Example)	Acceptance (example)	1 (example)
					Rejection	11
Remote controller off only accepted			Acceptance	Rejection	Acceptance	2
					Rejection	12
				Acceptance	Acceptance	3
					Rejection	13
Central priority	Acceptance			Rejection	Acceptance	4
					Rejection	14
				Acceptance	Acceptance	5
					Rejection	15
Individual priority (Last command priority)		Acceptance		Rejection	Acceptance	6
					Rejection	16
				Acceptance	Acceptance	7
					Rejection	17
Remote controller permission timer	Acceptance (only when timer is "ON".)	Rejection (only when timer is "OFF".)		Rejection	Acceptance	8
					Rejection	18
				Acceptance	Acceptance	9
					Rejection	19

Notes:

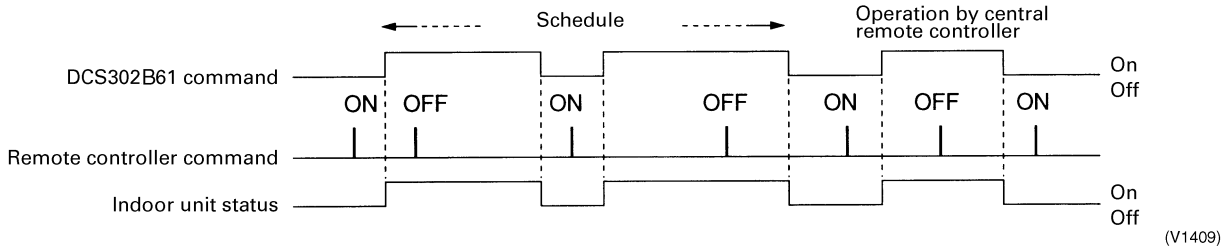
- ▭ : Settings when shipped from factory.
- If not using remote controller, do not select the remote controller permission timer. Operation cannot be executed by timer.


REMOTE CONTROL
Central remote controller
When ON/OFF, temperature setting and operation mode setting by local remote controller is forbidden, "UNDER CENTRAL CONTROL" is displayed on the remote controller.

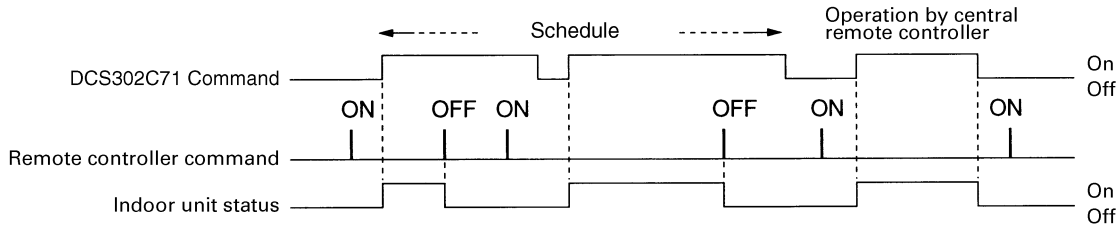
■ **Timing Chart for Each Control Mode No. (VRV system)**

Timing charts for scheduled operation and remote controller control for each control mode No. as follows.

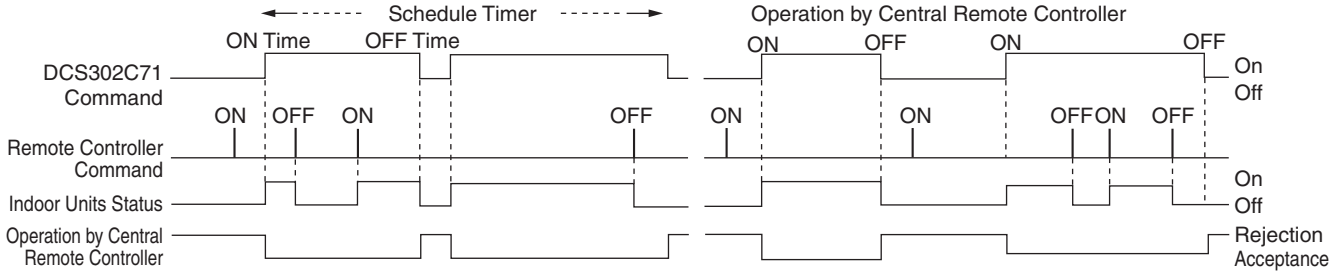
1. Remote controller rejection (Code No. 0, 1, 10, 11)



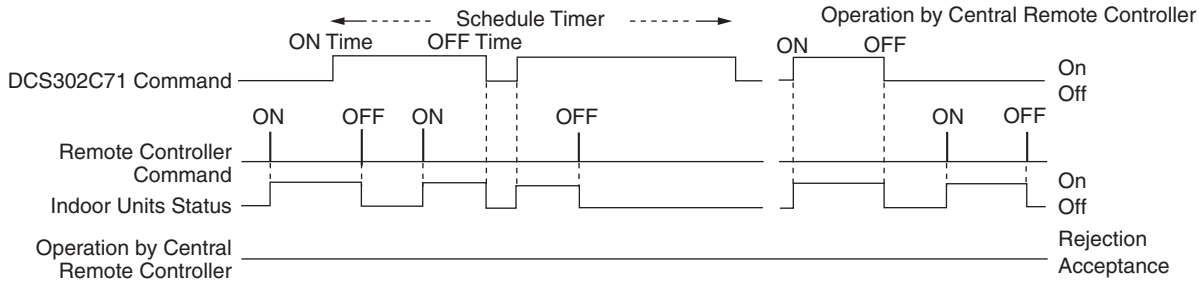
2. Remote controller off only accepted (Code No. 2, 3, 12, 13)



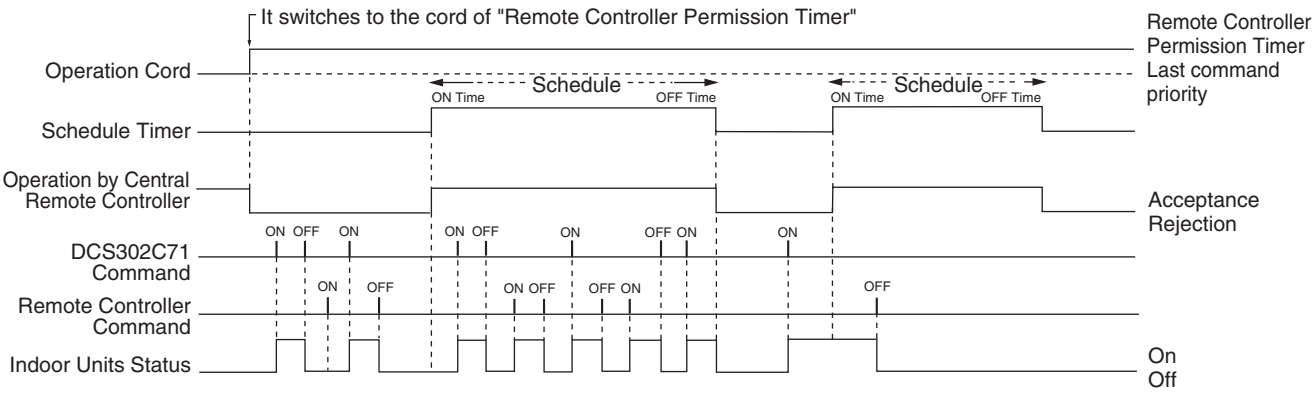
3. Central priority (Code No. 4, 5, 14, 15)



4. Individual priority (Last command priority) (Code No. 6, 7, 16, 17)



5. Remote controller permission timer (Code No. 8, 9, 18, 19)



★ Operation by remote controller is the same as central priority.

2.4.8 Setting of Central Remote Controller (Be sure to set 1 ~ 3 before electrical power is supplied.)

1. Connector for setting "Main" for control (Connector is provided when shipped from factory)

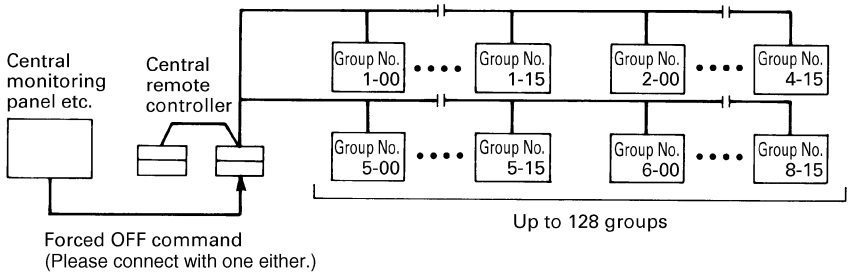
- When only one central remote controller is used, never remove the connector for setting "Main" for control.
- When plural central remote controller is used or central remote controller is used with other central controllers, the setting should be made according to the following table.

Pattern of central control equipment connection.			Connector for setting Main for control (Presence of connector)		
Central remote controller	Unified ON/OFF controller	Schedule timer	Central remote controller	Unified ON/OFF controller	Schedule timer
1~4 units	—	—	Use for 1 unit only. Not use for other units.	—	—
	1~16 units	—		Not used for all unit.	—
		1 unit			Not used.
	—	1 unit		—	Not used.

(However, be sure to remove the connector when the Parallel interface or Data station is used.)

2. Control range setting switch (SS3)

- This setting is required when up to 128 groups of indoor units are controlled by two central remote controller.

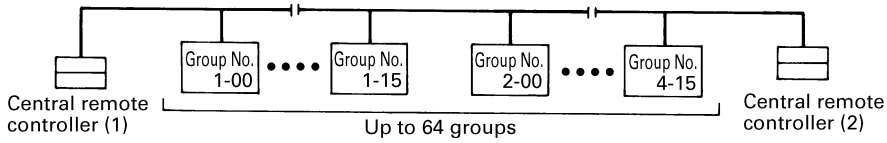


Setting of SS3 switch	Control range of indoor units
Control range setting: 5-00 ~8-15 / 1-00 ~4-15	When controlling indoor units of Group No. 1-00~4-15

Setting of SS3 switch	Control range of indoor units
Control range setting: 5-00 ~8-15 / 1-00 ~4-15	When controlling indoor units of Group No. 5-00~8-15

3. Main/Sub changeover switch (Setting is required for central control from 2 locations)

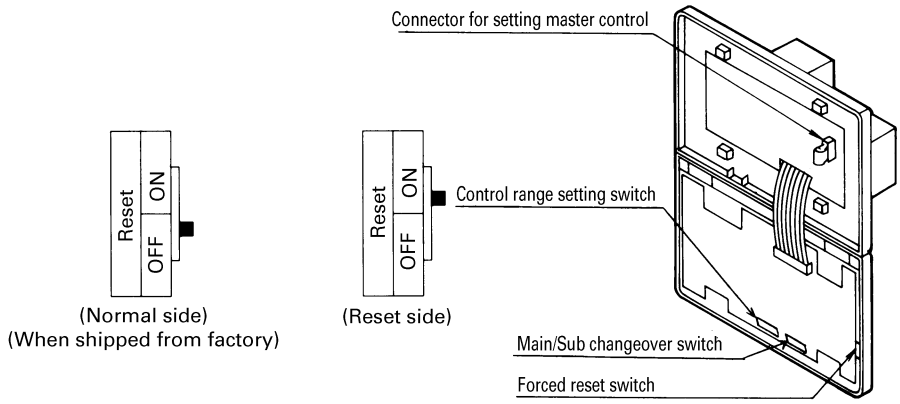
- This is required when you have a central control of the same indoor unit(s) from different places by using 2~4 central remote controllers.



Either (1) or (2) of the central control equipment should be set for Main and the other one for Sub.

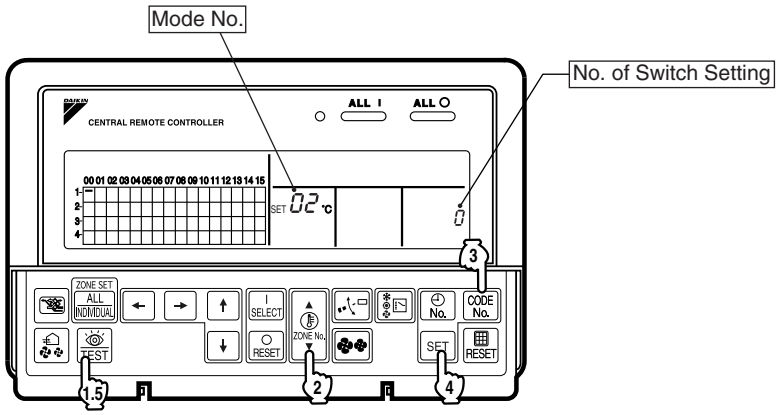
4. Forced reset switch

When changing the setting of the connector for setting main controller, etc., you can reset simply by setting it to the reset side once and returning to the normal side, without turning the power OFF.
(For normal operation, set the switch to the normal side)



5. Special Function Settings

Special functions on the central control system can be changed while in FIELD SETTING mode.



Setting Procedure

1. Press and hold the INSPECTION/TEST RUN button for a period of four seconds or more to set the system to FIELD SETTING mode.
2. Use the TEMPERATURE ADJUSTMENT button to select a desired Mode No.
   ▲ : Press to increase the Mode No. ▼ : Press to decrease the Mode No.
3. Press the CONTROL MODE (CODE No.) button to select a "Switch Setting No.".
4. Press the SET button to determine the content of the setting changed.
   Upon determination, the blinking the "Switch Setting No." will turn ON.
5. Press the INSPECTION/TEST RUN button to return the system to NORMAL mode.
   In this case, power supply is not needed to turn ON again.

Example: In case of no restriction items from the sub central remote controller while in double central control, make setting of the Mode No. to "02" and the Switch Setting No. to "0".

6. Refreshed operation

Refreshed operation is the function to transmit setting of "Temperature control", "Temperature setting" automatically from DCS302C71.

"Refreshed operation" is "ON" when shipped from the factory.

Factory Setting

It depends on the setting of outdoor systems that an indoor unit setting is "Temperature control " or " Temperature setting".

Outdoor Units Systems	Indoor Units Mode
Cooling Mode	Cooling 82°F
Heating Mode	Heating 72°F
Fan Mode	Fan Operation

In case of Refreshed operation is "ON"

When setting is changed by DCS302C71, it operates by this setting from the next operation.

If it sets up with 79°F in cooling by DCS302C71, next operation will also be operated at 79°F in cooling. (Even if it has changed into heating operation, fan only operation with wired or wireless remote control, it operates at 79°F in cooling.)

When zone registration is carried out by Central Remote Controller.

It operates from next time with the value set up in the zone.

When a zone 1 is set up with 68°F of heating. (Refer to the system of the following figure.)

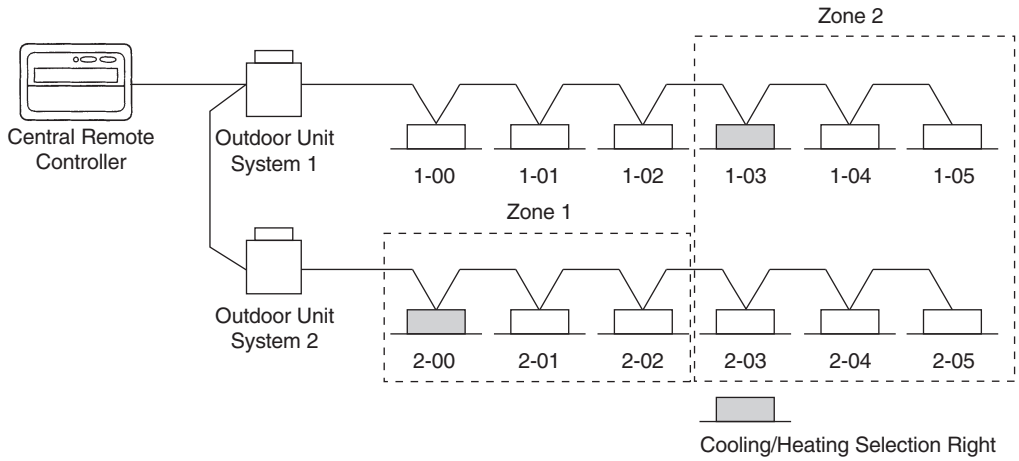
When controlled by Central Remote Controller, 3 indoor units registered into the zone 1 are operated by 68°F of heating. Because priority is given to zone setting, even if it sets up 2-02 with 77°F of heating on an individual screen from Central Remote Controller, 2-02 is operated at 68°F.

When there are two or more indoor units in a zone.

Because an operating mode depends on the outdoor unit, the operating mode of each indoor unit does not become the same setting.

When the outdoor unit system 1 is cooling, the outdoor unit system 2 is heating and it operates by the system of the following figure. Setting of a zone 2 is operated in heating mode, because 2-03, 2-04, and 2-05 do not have a cooling/heating selection right as for 79°F of cooling, but temperature setting becomes 79°F.

When you unify the operating mode of an indoor unit in the same zone, please set up a zone in the indoor unit of the same outdoor unit system.



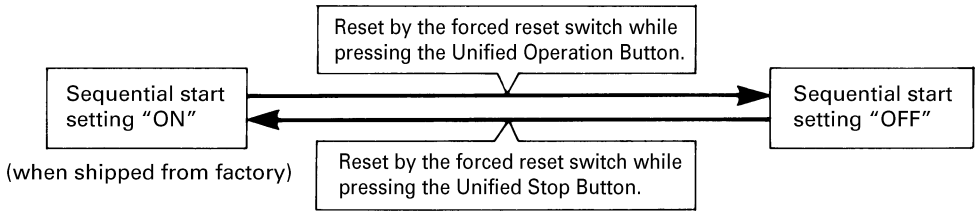
Setting Contents and Setting No.

Mode No.	Setting contents	No. of setting switch		
		0	1	2
00	Setting of sequential operation function	NO	YES	–
01	Setting of refresh function	NO	YES	–
02	Setting of restriction items from sub central remote controller while in double central control function	Disabled	Enabled	–
03	Setting of area designation for forced OFF (Operation with T1 and T2 entered)	Forced OFF all within the scope of control	Forced OFF only within the scope of control	Forced thermostat OFF with the scope of control

Items indicated by boldface represent the factory set for the No. of Switch Setting.
Do not make setting of any items not listed in the table above.

■ **Setting for sequential start function**

The central remote controller is equipped with the sequential start function, which starts the indoor units in about 2~3 seconds interval during the unified operation. (The switch is set at "ON" when shipped from factory.)
You can change the sequential start setting from "ON" to "OFF" as follows.


Reset by the forced reset switch while pressing the Unified Operation Button.
Sequential start setting "ON"
(when shipped from factory)
Sequential start setting "OFF"
Reset by the forced reset switch while pressing the Unified Stop Button.

Note:
The sequential start function is for reducing the load of the electrical facility, but not for reducing the load of the large rush current when the compressors are started at the same time. This is also the same for Unified ON/OFF controller and Schedule timer.

■ **Refresh function**

This function is used to automatically send "OPERATION MODE" and "TEMPERATURE SETTING" from the central control system while in operation. In order to disable the refresh function, set the "No. of Switch Setting" to "0".

■ **Restriction items from sub central remote controller while in double central control function**

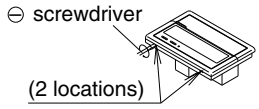
While in double central control function, no settings of zone interlock and operation code can be made from the sub central remote controller. In order to disable the refresh function from the sub central remote controller, set the "No. of Switch Setting" to "0".

■ **Setting of area designation for forced OFF**

- In order to stop all indoor units within the scope of control as a single unit using the entry of T1 and T2, set the "No. of Switch Setting" to "1".
- In order to stop all indoor units within the scope of control with forced thermostat OFF using the entry of T1 and T2, set the "No. of Switch Setting" to "2". With this parameter set to "2", no forced stop can be made on any indoor unit.

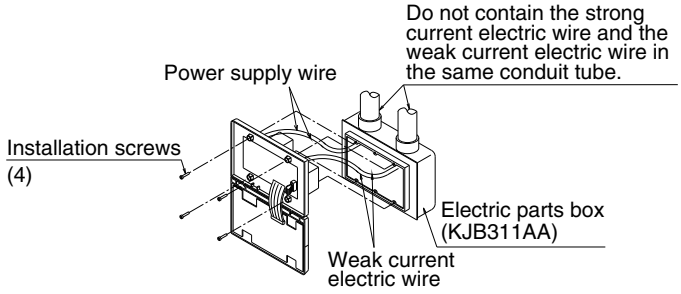
Installation

(1) Open the upper part of remote controller.
Insert a ⊖ screwdriver (2 locations) into the recess between the upper part and the lower part of remote controller and twist the screwdriver lightly.

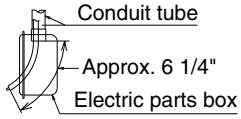


PC board is attached with both the upper and lower part of remote controller. Do not damage the board with the screwdriver.

(2) Open the upper part of remote controller and install the Electric parts box with the attached installation screws (M4 × 16).

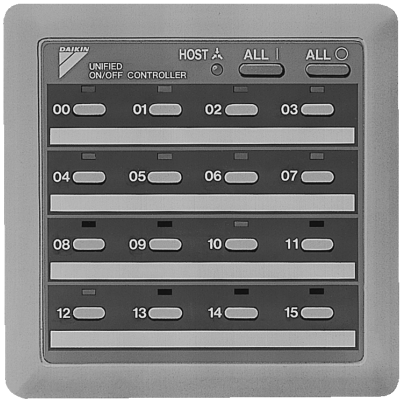

Do not contain the strong current electric wire and the weak current electric wire in the same conduit tube.
Power supply wire
Installation screws
(4)
Electric parts box
(KJB311AA)
Weak current electric wire

NOTE) Suitable length of the electric wire is about 6 1/4" (from electric parts box) If it is difficult to contain a long wiring, strip the sheathed part of the wiring.



2.5 DCS301C71 Unified ON/OFF Controller

Turns up to 16 groups of indoor units (max. 128 units) on/off (operation/stop) by individual group or all at once, and lets you check display of operation/malfunction at the same time.

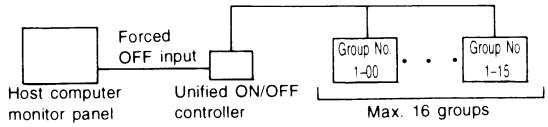


- For a maximum of 16 groups of indoor units (max. 128 units), unified operation/stop or individual operation/stop can be performed with this optional accessory. Also allows you check operation/error display at a glance.
- By combining with a central remote controller and schedule timer, you can construct a system that matches the size and use of the building.
- Up to 8 units connectable within 1 system.
  Up to 16 units in the double central control mode.
- Applicable wiring methods include bus and star in addition to crossover type.
- Can be used in combination with other D-BACS equipment.

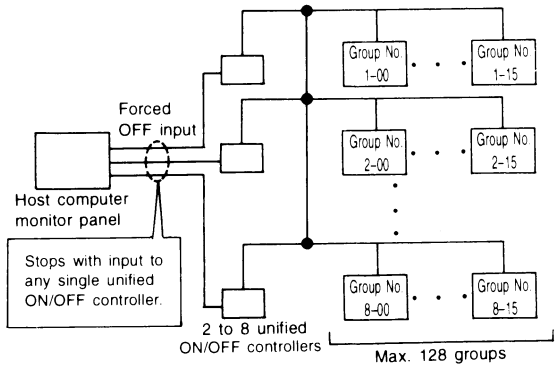
2.5.1 System Configuration

This unified ON/OFF controller enables individual and unified operation/stop for a maximum of 16 groups of indoor units. With 2 to 8 unified ON/OFF controllers, individual and unified control is possible with up to a maximum 128 groups of indoor units.

- When using 1 unified ON/OFF controller



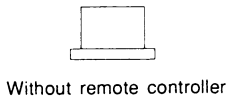
- When using 2 to 8 unified ON/OFF controllers



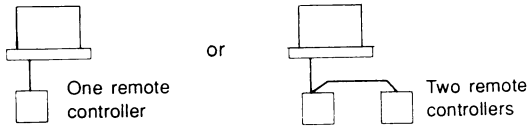
The Unified ON/OFF Controller cannot be used in conjunction with the optional Group Control Adapter.

The groups of indoor units are as follows:

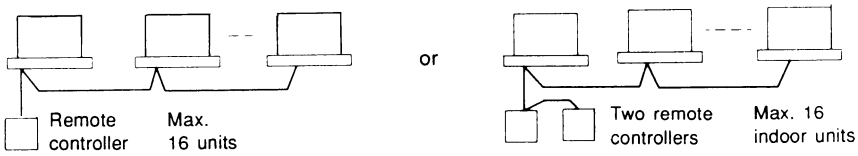
1. One indoor unit without remote controller



2. One indoor unit controlled by one or two remote controllers



3. A maximum of 16 indoor units controlled in groups by one or two remote controllers

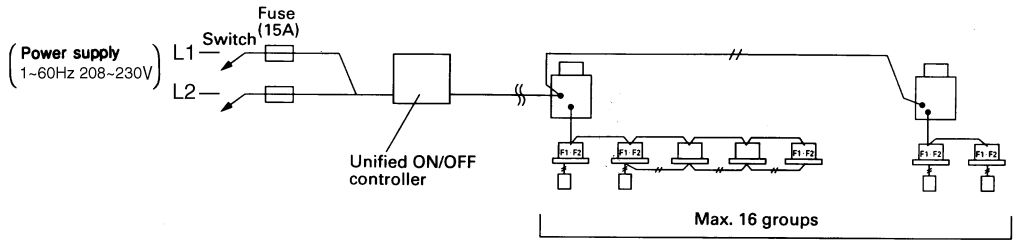


2.5.2 Electric Wiring

<General Instructions>

- All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
- Use copper conductors only.
- All field wiring and components must be provided by licensed electrician.
- Unit shall be grounded in compliance with the applicable local and national codes.
- Fit the power supply wiring with a fuse and a switch.
- After wiring work, check power to the equipment shuts OFF when switch is shut OFF.

<Wiring Outline>



Wiring Specification

	Type	Size
Power Supply Wiring	H05VV-U3G	(Note 1)
Transmission Wiring	Sheathed Wire (2 wire) (Note 2)	18-2AWG or 16-2AWG

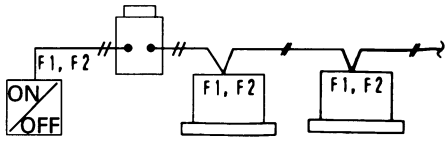
Notes:

1. The size of power supply wiring must comply with the applicable national and local codes.
2. Allowable length of transmission wiring is as follows.
   Max. 3280 ft (Total wiring length: 6560 ft)

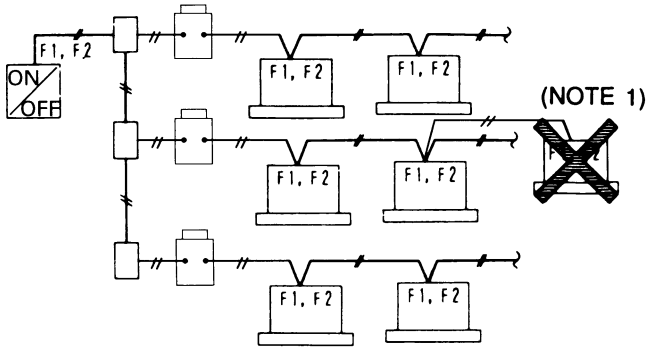
Connect the wiring between indoor and outdoor units, indoor/outdoor units and power supply, and indoor units and remote controllers.
For details, refer to the installation manuals of indoor and outdoor units.

<Examples of Wiring for Transmission>

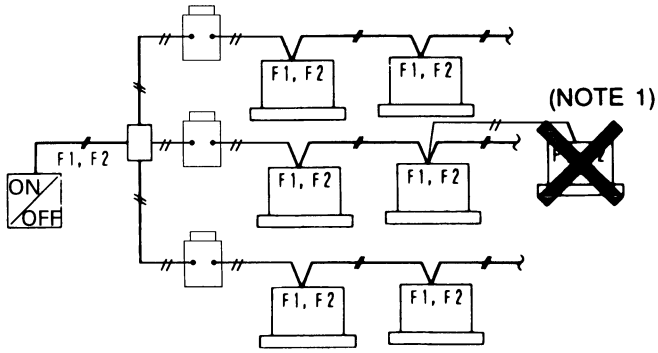
1. **Series Wiring**

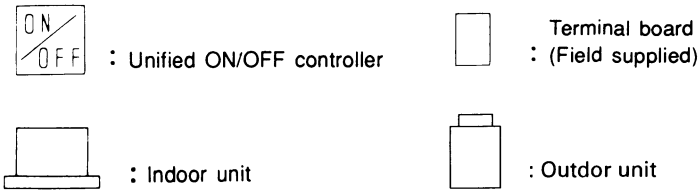


2. **Bus Type Wiring** (Can be branched up to 16 branches)
   Example of 3 branches



3. **Star Type Wiring** (Can be branched up to 16 branches)
   Example of 3 branches

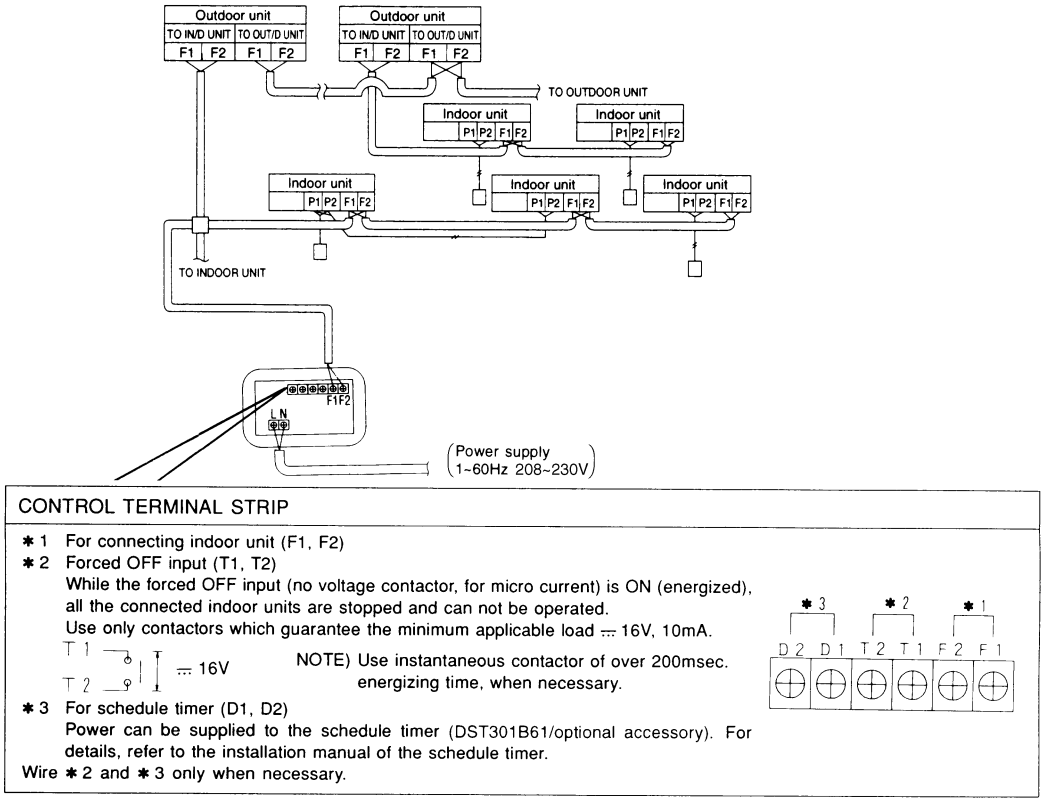




Note:

1. No branching is allowed after branching.
2. Use a relay terminal board (field supplied) to branch more than 3 control wires from the same terminal board.

<Wiring to the Indoor Unit and Outdoor Unit>



CONTROL TERMINAL STRIP

✱1 For connecting indoor unit (F1, F2)

✱2 Forced OFF input (T1, T2)
While the forced OFF input (no voltage contactor, for micro current) is ON (energized), all the connected indoor units are stopped and can not be operated.
Use only contactors which guarantee the minimum applicable load ⎓ 16V, 10mA.

NOTE) Use instantaneous contactor of over 200msec. energizing time, when necessary.

✱3 For schedule timer (D1, D2)
Power can be supplied to the schedule timer (DST301B61/optional accessory). For details, refer to the installation manual of the schedule timer.

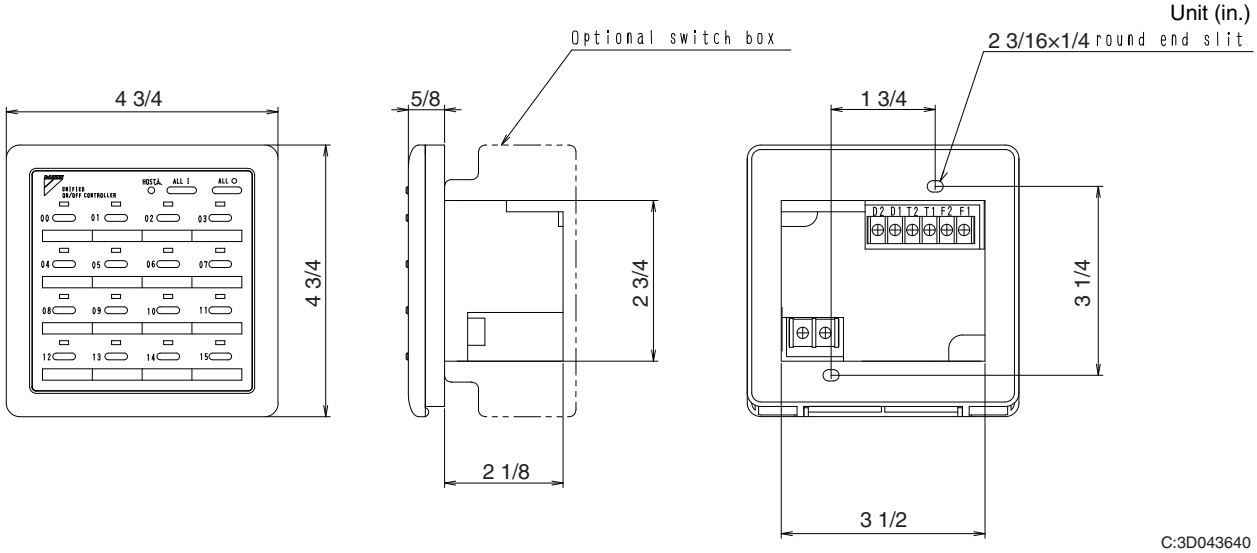
Wire ✱2 and ✱3 only when necessary.

Note:
Do not connect the power supply wiring to the control terminal strip. If connected by mistake, it may damage or burn electrical parts of optional controllers for centralized control and indoor unit. It may result in serious danger. Be sure to check wirings before turning the power ON.

2.5.3 Dimension

Unified ON/OFF Controller

■ **DCS301C71**



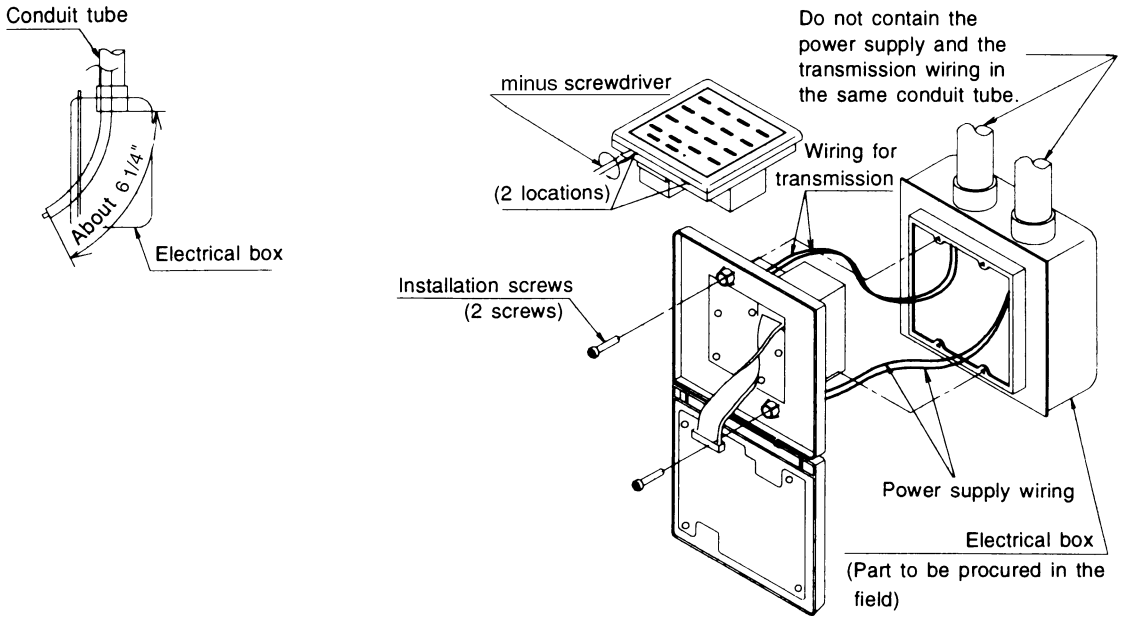
C:3D043640

2.5.4 Installation

1. Open the upper part of remote controller.
   Insert a minus screwdriver (2 locations) into the recess between the upper part and the lower part of remote controller and twist the screwdriver lightly.

PC board is attached with both the upper and lower part of remote controller. Do not damage the board with the screwdriver.

2. Open the upper part of remote controller and install the electrical box (part to be procured in the field) with the attached installation screws (M4×16).


Conduit tube
About 6 1/4"
Electrical box
minus screwdriver
(2 locations)
Do not contain the power supply and the transmission wiring in the same conduit tube.
Wiring for transmission
Installation screws (2 screws)
Power supply wiring
Electrical box
(Part to be procured in the field)

Note:
Suitable length of the electric wire is about 160mm from the inlet of the electrical box. If it is difficult to contain a long wiring, strip the sheathed part of the wiring.

2.5.5 Initial Setting

1. Connector for setting master controller (X1A) (Provided with connector at factory set)

- When using 1 unified ON/OFF controller, do not disconnect the connector for setting master controller. (Use the unit with the connector in the state in which it was delivered.)
- When using multiple unified ON/OFF controllers, or using the unified ON/OFF controller in conjunction with other optional controllers for centralized control, makes settings as indicated in the right table.

Pattern of connection of optional controllers for centralized control			Connector for setting master controller (X1A) Settings		
Unified ON/OFF Controller	Central Remote Controller	Schedule Timer	Unified ON/OFF Controller	Central Remote Controller	Schedule Timer
1 to 16	—	—	Set one to “Used” and all the rest to “Not used”.	—	—
	1 to 4	—	Set all to “Not used”.	(Note)	—
	—	1	Set one to “Used” and all the rest to “Not used”.	—	“Not used”
	1 to 4	1	Set all to “Not used”.	(Note)	“Not used”

Note:
For instructions on how to set the connector for setting master controller on the central remote controller, see the installation manual provided with the central remote controller.

2. Switch for Setting Each Address (DS1)

These switches are used to set group control address.

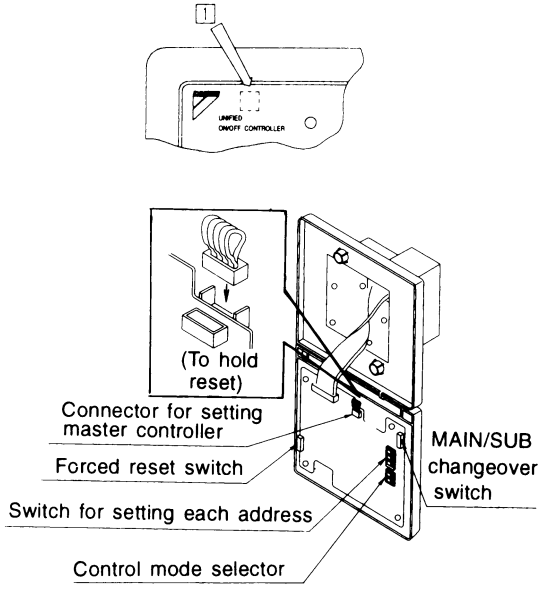
Groups Nos. 1-00 through 1-15 are grouped in the same control group when the unit is shipped from the factory.

Each Address	1-00~1-15	2-00~2-15	3-00~3-15	4-00~4-15	5-00~5-15	6-00~6-15	7-00~7-15	8-00~8-15
DS1 setting	DS1 ON 1 2 3 Set each address (Factory setting)	DS1 ON 1 2 3 Set each address	DS1 ON 1 2 3 Set each address	DS1 ON 1 2 3 Set each address	DS1 ON 1 2 3 Set each address	DS1 ON 1 2 3 Set each address	DS1 ON 1 2 3 Set each address	DS1 ON 1 2 3 Set each address

After setting, attach the number seal applicable to respective control range of the attached switch display sticker, as shown in the diagram below.

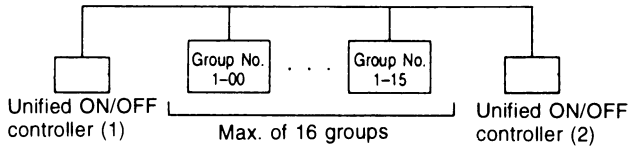
(Example)

In The Case of 1-00 to 1-15, Attach 1.



3. MAIN/SUB Changeover Switch Setting

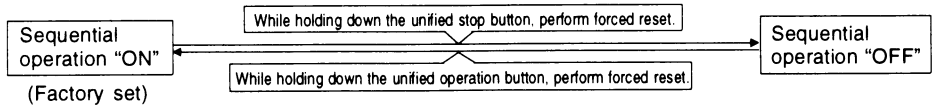
With two unified ON/OFF controllers, centralized control (indoor units) is possible from different locations. In this kind of set-up, it is necessary to set the MAIN/SUB changeover switch.



One of the two unified ON/OFF controllers (1) · (2) is set to “MAIN” while the other is set to “SUB”.

4. Setting of the Sequential Operation Function

The unified ON/OFF controller is equipped with a sequential operation function that sequentially turns indoor units on in 2-second intervals during unified operation. (Sequential operation is factory set to “ON.”) To switch sequential operation ON or OFF, set as follows.

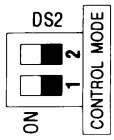
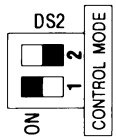
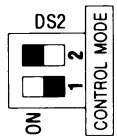
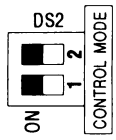

Sequential operation “ON”
(Factory set)
While holding down the unified stop button, perform forced reset.
While holding down the unified operation button, perform forced reset.
Sequential operation “OFF”

Note:

The sequential operation function is designed to reduce the load on the power supply equipment, but does not guarantee that compressors will not be started simultaneously, so do not count on a capacity reduction effect by power supply equipment breaker selection.

5. Control Mode Selector (DS2)

The following four patterns of control mode can be set.

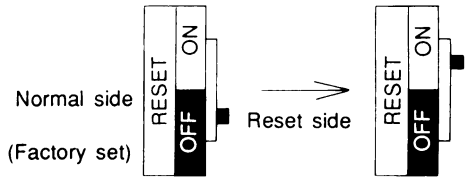
Control Mode	Individual	Centralized	Timer Operation Possible by Remote Controller	ON/OFF Control Impossible by Remote Controller
Content	Operation/stop is controlled by both unified ON/OFF controller and remote controller.	After operated by unified ON/OFF controller, operation/stop is freely controlled by remote controller until stopped by unified ON/OFF controller.	When used in conjunction with schedule timer, operation/stop is controlled freely by remote controller during the set time but operation is not available when schedule timer is ON.	Operation/stop is controlled by unified ON/OFF controller only. (This unit can not be operated/stopped by remote controller.)
DS2 Setting	 (Factory set)			

Note:

- "■" Indicates the position of switches.
- Set control mode before turning power supply ON.
- When used in conjunction with central remote controller, the control modes of the central remote controller has the priority.

6. Forced Reset Switch (SS1)

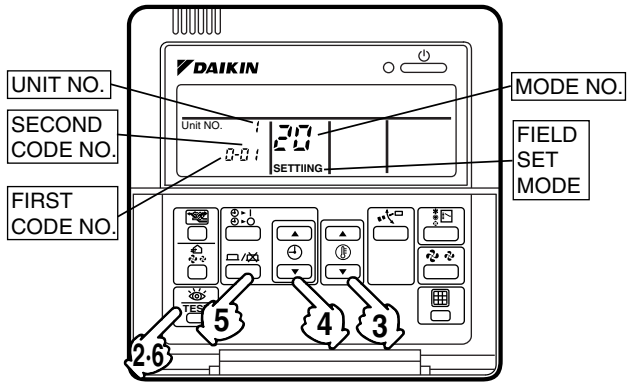
When changing the setting of the connector for setting master controller, etc., you can reset simply by setting it to the reset side once and returning to the normal side, without turning the power OFF.
(For normal operation, set the switch to the normal side.)



2.5.6 Setting Group No. for Centralized Control

Set the group number of each group of the indoor unit from the remote controller. (In case of no remote controller, also connect the remote controller and set the group No. Then, remove the remote controller.)

1. Turn ON the power of the indoor unit and unified ON/OFF controller. (Unless the power is ON, no setting can be made.)
   Check that the installation and electrical wiring are correct before turning the power supply ON.
   When the power supply is turned ON, all LCD appear once and the unit may not accept the operation for about one minute with the display of " HOST " flashing (an interval of ON, ON, and OFF).
2. While in the normal mode, hold down the " TEST " button for a minimum of 4 seconds.
   The remote controller will enter the FIELD SET MODE.
3. Select the MODE No. "00" with the " " button.
4. Use the " " button to select the group No. for each group. (Group numbers increase in the order of 1-00, 1-01, ...1-15, 2-00, ... 8-15.)
5. Press " " to set the selected group No.
6. Press " TEST " to return to the NORMAL MODE.



Note:

- For simplified remote controller, see the installation table.
- For setting group No. of HRV and wiring adaptor for other air conditioners, etc., refer to the instruction manual attached.

NOTICE

Enter the group No. and installation place of the indoor unit into the attached installation table. Be sure to keep the installation table with the operation manual for maintenance.

2.5.7 Confirming Operation

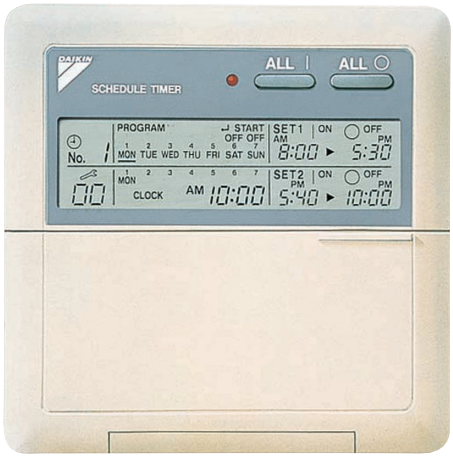
Before starting test operation, supply power to the indoor units, outdoor units, and unified ON/OFF controller and press the ON/OFF BUTTON.
If the operation lamp flashes, it indicates a malfunction in the indoor unit of the applicable group.
If the display of " HOST " flashes, it indicates a malfunction in the optional controllers for centralized control. Check for such malfunctions.

Note:

- For test operation of indoor and outdoor units, refer to the installation manual attached with the outdoor unit.
- After turning the power supply ON, if the unit does not accept operation for two minutes or more with the display of " HOST " flashing, check the following points.
  - Check that setting of the connector for setting master controller is correct.
  - Check that the group No. for centralized control has been set.

2.6 DST301BA61 Schedule Timer

Enables you to connect and control weekly schedule for up to 128 indoor units all together.

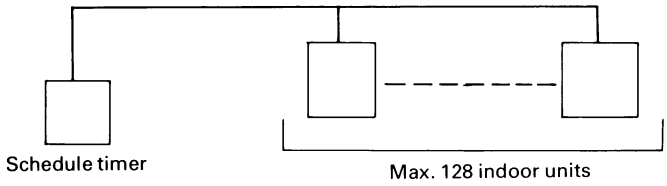


- Simultaneous control of up to 128 indoor units is managed by a week schedule.
- The start and stop time for twice a day can be set for the week in increments of 1 minute.
- By combining with a central remote controller and schedule timer, you can construct a system that matches the size and use of the building.
- If used together with a central remote controller, you can set up to 8 schedule patterns which can be distributed among zones as desired using the central remote controller.
- Is equipped with a compensation function for power failure up to 48 hours.
- Features thin design of a mere 5/8" in thickness. (Uses JIS recessed box for 2.)
- Applicable wiring methods include bus and star in addition to crossover type.
- Can be used in combination with other D-BACS equipment.

2.6.1 System Configuration and Electric Wiring

With a schedule timer, you can set on/off time twice a day by units of 1 week for up to 128 indoor units.

- System Configuration



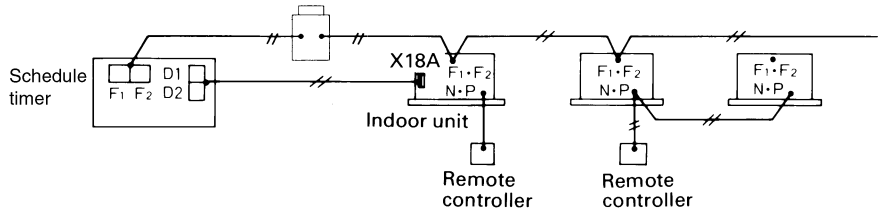
If using the schedule timer alone, you do not have to set the centralized control group No. for group control.

- **Transmission Wiring**

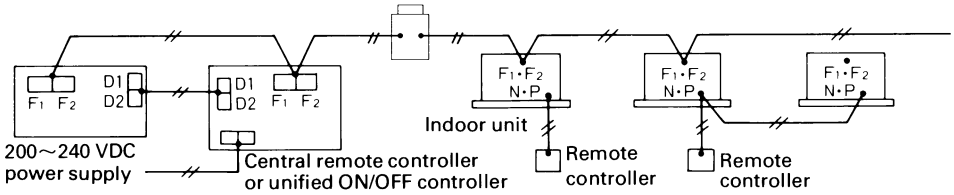
<Indoor Unit Wiring>

1. If using the schedule timer alone:

- For the schedule timer's power supply, connect the schedule timer (D1, D2) with the connector (X18A) on the indoor unit PC board by crimped style terminal with the attached electric wire.



2. If using in combination with other optional controllers for centralized control:



Transmission wiring for control: AWG 18 or 16 sheathed vinyl cord or cable (2 wire) ..... Max. 3280 ft (Total Max. 6560 ft)

<Transmission Wiring Connection Example>

1 series wiring, 2 bus wiring, and 3 star wiring are the same as with the central remote controller.

2.6.2 Names and Functions (DST301BA61)

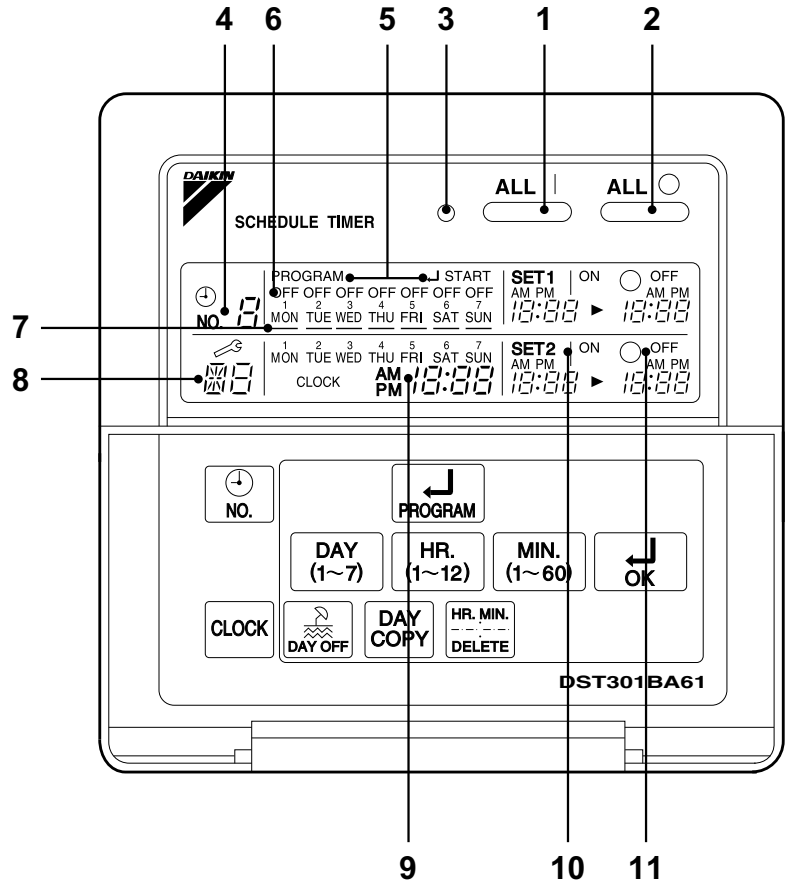


Fig. 1

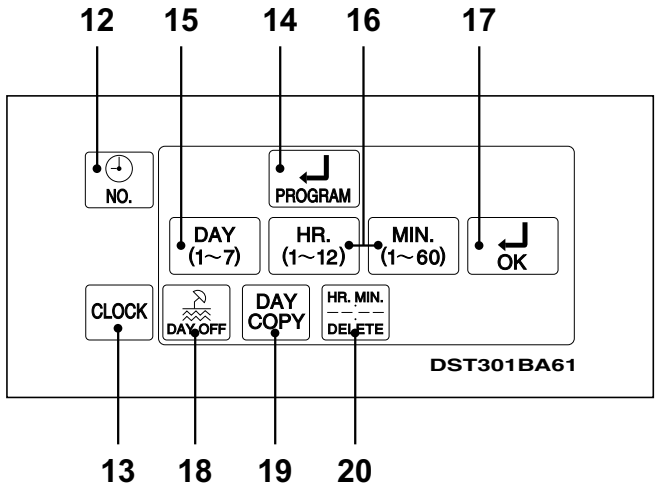


Fig. 2

3P124623-5C

1	**UNIFIED OPERATION BUTTON “ ALL ”**
	Press this button to perform the unified operation regardless of the No. of programmed time.
2	**UNIFIED STOP BUTTON “ ALL ”**
	Press this button to perform the unified stop regardless of the No. of programmed time.
3	**OPERATION LAMP (RED)**
	The light turns on during the operation of the indoor unit.
4	**DISPLAY “ NO. 8 ” (TIME NO.)**
	Displays the time No. only when used in conjunction with the central remote controller.
5	**DISPLAY “PROGRAM ↵START.” (PROGRAMMING START)**
	The light turns on when the timer is programmed.
6	**DISPLAY “ OFF ” (HOLIDAY SETTING)**
	Lights above the day of the week set as holiday. The operation controlled by timer is not available on that day.
7	**DISPLAY “ — ” (SETTING OF DAYS OF A WEEK)**
	Flashes below the day of the week programmed.
8	**DISPLAY “ ” (MALFUNCTION CODE)**
	Displays the contents of malfunction during the stop due to malfunction.
9	**DISPLAY “ MON TUE WED THU FRI SAT SUN CLOCK AM PM 10:00 ” (PRESENT TIME)**
	Displays the present day of the week and time.
10	**DISPLAY “ AM PM ON 10:00 ” (PROGRAMMED TIME OF SYSTEM START)**
	Displays the time programmed to start.
11	**DISPLAY “ OFF AM PM 10:00 ” (PROGRAMMED TIME OF SYSTEM OFF)**
	Displays the time programmed to stop.

12	**TIME NO. BUTTON “ NO. ”**
13	**CLOCK ADJUSTING BUTTON “ CLOCK ”**
	Press this button to set the present time.
14	**PROGRAMMING START BUTTON “ PROGRAM ”**
	Press this button to set or check the No. of programmed time. Press it again after you are through with the program.
15	**BUTTON FOR SELECTING DAYS OF A WEEK “ DAY (1~7) ”**
	Press this button to select the day of the week.
16	**HOUR/MINUTE BUTTON “ HR. (1~12) MIN. (1~60) ”**
	Press this button to adjust the present time and the programmed time.
17	**TIMER ON BUTTON “ OK ”**
	Press this button to set the present time and the programmed time.
18	**HOLIDAY SETTING BUTTON “ DAY OFF ”**
	Press this button to set holidays.
19	**BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY “ DAY COPY ”**
	Use this button to set the No. of programmed time same as that of the previous day.
20	**PROGRAM CANCELING BUTTON “ HR. MIN. DELETE ”**
	Use this button to set the programmed time to cancel. The display shows “ – ; – – ”.

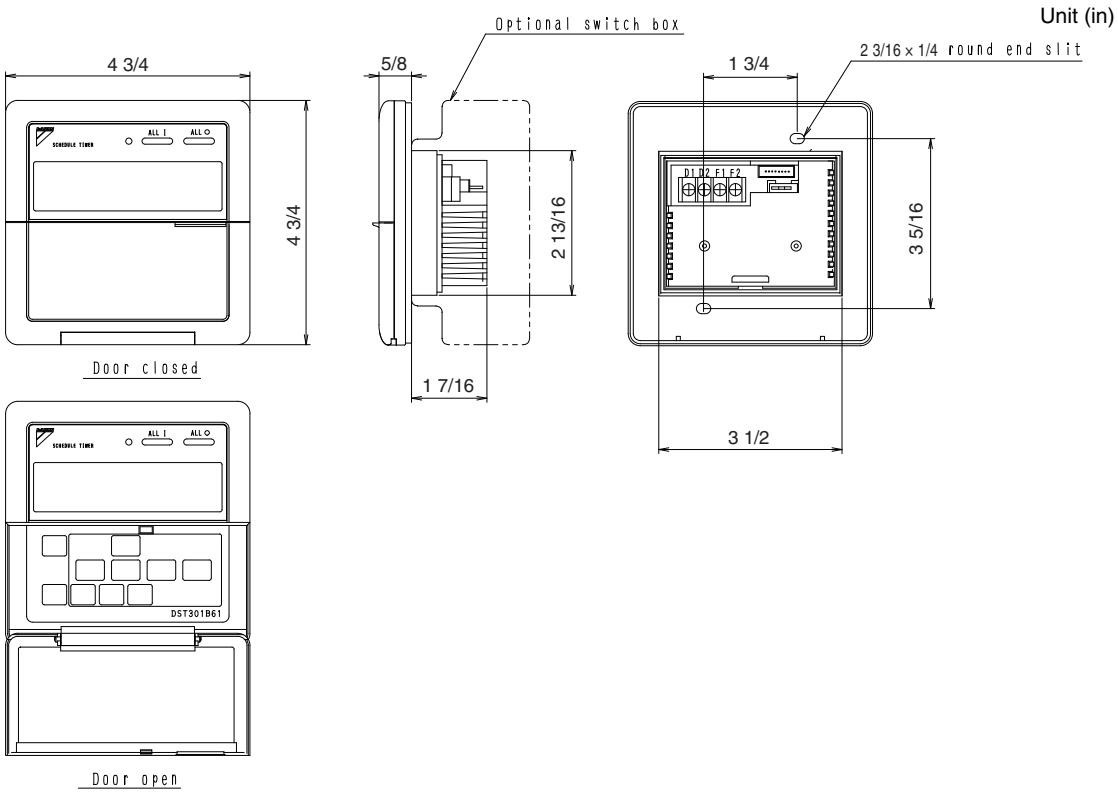
(Note)
1. Please note that all the displays in the figure appear for explanation purpose or when the cover is open.

3P124623-5C

2.6.3 Dimension

Schedule Timer

- **DST301BA61**

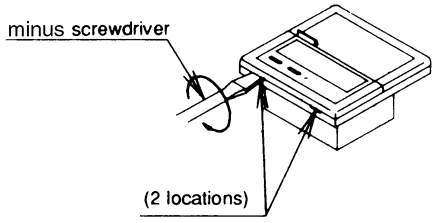


C:3D049544

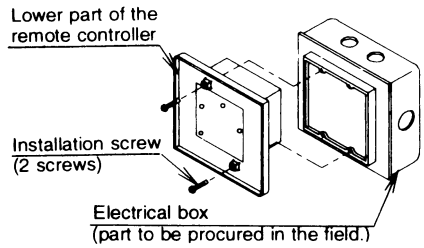
2.6.4 Installation and Initial Setting

1. Remove the upper part of the remote controller.

- Insert a minus screwdriver (2 locations) into the recess between the upper part and the lower part of the remote controller and twist the screwdriver lightly.
  (The PC board is attached with the upper part of the remote controller. Do not damage electric parts with a screwdriver, etc.)



- Attach the lower part to the electrical box (part to be procured in the field) with the provided installation screws. (Select a flat face as an installation place. Do not tighten the installation screws excessively not to damage the lower part of the remote controller.)



For part to be procured in the field electrical box, use KJB211AA (optional accessory).

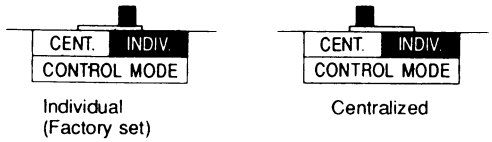
2. Initial Setting

1. Setting connector for individual use (X1A) (Factory set : OFF) (Set for individual use only)

- **For individual use of schedule timer**
  Insert the connector attached with the body case on the PC board.
- **For combined use with other optional controllers for centralized control**
  Do not change the factory setting.

2. Control mode selector (SS2) (Set for individual use only)

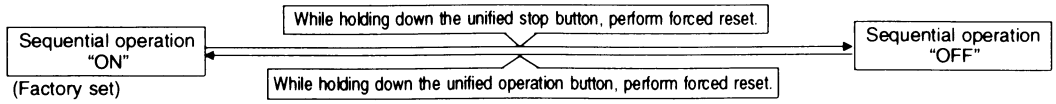
By changing the switch, setting mode of individual and centralized operation is available.



Note:
When used with other optional controllers, control mode of central remote controller and unified ON/OFF controller have the priority.

3. Setting of the sequential operation function

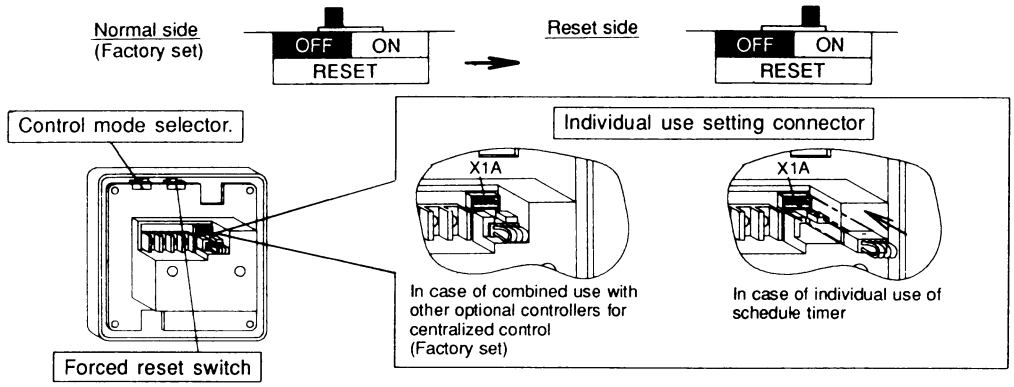
The schedule timer is equipped with a sequential operation function that sequentially turns indoor units on in 2-second intervals during unified operation.
(Sequential operation is factory set to “ON.”)
To switch sequential operation ON or OFF, set as follows.


Sequential operation “ON”
(Factory set)
While holding down the unified stop button, perform forced reset.
While holding down the unified operation button, perform forced reset.
Sequential operation “OFF”

Note:
The sequential operation function is designed to reduce the load on the power supply equipment, but does not guarantee that compressors will not be started simultaneously. You cannot therefore count on a capacity reduction effect by power supply equipment breaker selection.

4. Forced reset switch (SS1)

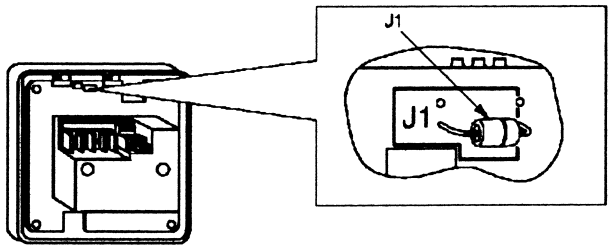
When changing the setting of the connector for individual use, etc., the switch can be reset simply by setting it to the reset side once and returning to the normal side. This procedure enables to reset without turning off the power. (Set the normal side at normal operation.)



5. Setting for special function

When you want to have a programmed operation of a part of indoor units by using only schedule timer, cut off JP1 and supply the power again.

You can have a programmed operation of the indoor units set the address for central control by local remote controller.



3. Transmission Wiring

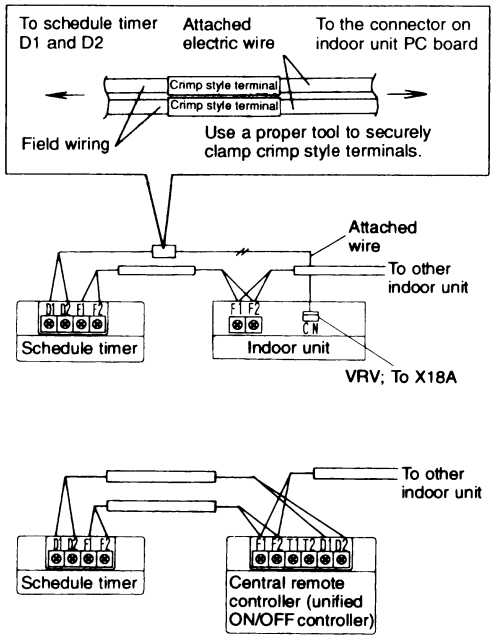
■ **In case of individual use of schedule timer**

Connect terminals of the schedule timer (F1, F2) with terminals of the indoor unit (F1, F2). Connect terminals of the schedule timer (D1, D2) and the connector on the indoor unit PC board, using the attached electric wire and crimp style terminals.

Prevent the connection part of crimp style terminal from getting out of the electric parts box of indoor unit.

■ **In case of combined use with other optional controllers for centralized control**

Connect terminals of the schedule timer (F1, F2, D1, D2) and the terminals of the central remote controller (or unified ON/OFF controller).



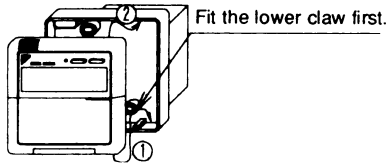
Wiring Specifications

	F1, F2	D1, D2
Wiring	Sheathed wire (2-wire)	Sheathed wire (2-wire)
Gauge	AWG #18-#16	AWG #18-#16
Length	Max. 3280 ft	Max. 492 ft

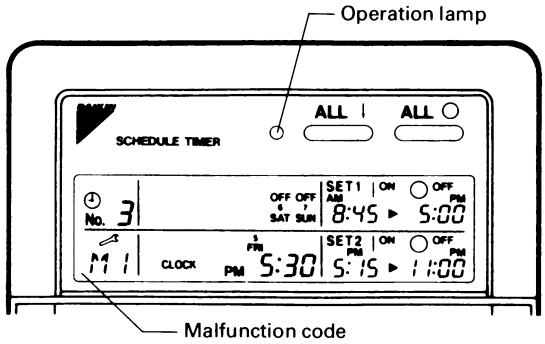
NOTES:

1. Electrical box and transmission wiring are not attached.
2. Do not touch the PC board with your hand.
3. Keep transmission wiring at least 2 inch away from power supply wiring to avoid malfunctions.

4. Install the Upper Part of the Remote Controller as before.



2.6.5 Error Diagnosing Function



This schedule timer is provided with the malfunction diagnosing function. The malfunction code flashes if there are any communication malfunctions between and among the optional controllers for centralized control. In addition, the operation lamp also flashes if there are any communication malfunctions with the indoor unit. Check the contents of the display for the problem indicators and contact your DAIKIN dealer to report the source of the problem.

Operation Lamp	Malfunction (Error) Code	Contents of Malfunction (Error)
Turn Off	M1	Failure of PC board of schedule timer.
Turn On or Off	M8	Malfunction of transmission between each optional controller for centralized control.
Turn On or Off	MA	Improper combination of optional controllers for centralized control.
Turn On or Off	MC	Address failure of schedule timer.
Blink	UE	Malfunction of transmission between indoor unit and optional controllers for centralized control.
Blink	—	Malfunction in indoor unit (Refer to the malfunction codes of the indoor remote controller, while also read the “CAUTION FOR SERVICING” attached to the indoor unit.)

2.7 DCS601C71 intelligent Touch Controller

2.7.1 Features

This controller is a central remote controller offering higher functionality and easier operation than the previous DCS302C71controller.

Up to 64 groups of indoor units may be connected to 1 unit of this controller.

This controller aims to be a product positioned between the central controlling device (central controller DCS302C71) and the I-Manager for large scale buildings, and is a central controller most suitable for middle and small size buildings.

< Products Features >

1. High Level Functions
   · Annual schedule control
   · Electricity proportional distribution function (option)
   · D-Net function
2. Easy Operation
   · Color liquid crystal
   · Icon display
   · Touch panel application
   · Air conditioner name and zone name input available
3. DIII-NET × 1 line (64 units) and another line (64 units) with DIII-NET Plus Adapter.
4. Saving expenses
   · Controlling personnel not required
   · Energy saving schedule
   · Functions equal to those of a compact monitor panel

■ **Operation Menu**

intelligent Touch Controller is capable of starting/stopping of the operation by the group or zone. Collective starting/stopping is also available.

■ **Air Conditioner Detail Setup**

Temperature setting, switching between operation modes, switching of speed and direction of wind and remote control mode setting are available by the group, by the zone or collectively.

■ **Monitoring of Various Information on Indoor Units**

Information on operation such as the operation mode and temperature setting of the indoor units, maintenance information including the filter or element cleaning sign, troubleshooting information such as error codes can be displayed by the group or the zone.

■ **Diversified Operation Modes**

Operation can be controlled both with the main unit and the remote control to provide diversified operation management. Setting with the main unit allows the following remote control settings by the group, by the zone or collectively:

1. Start/Stop	2. Operation Mode	3.Temperature Setting
:(Remote control) Inhibited	:(Remote control) Inhibited	:(Remote control) Inhibited
:(Remote control) Permitted	:(Remote control) Permitted	:(Remote control) Permitted
:Priority		

■ **Zone Control Simplifying Complicated Setting Operations**

Up to 128 groups can be controlled with the intelligent Touch Controller.

More than one group can be consolidated into a zone, which can be registered, to allow the following settings by the zone. This eliminates the need for repeating the same setting operation for each group. Function to allow collective setting for all groups is also available.

· Start/stop · Temperature setting · Switching between operation modes
· Setting of direction and fan speed · Disabling/enabling the remote control

■ **Detailed Scheduled Operation Control**

The intelligent Touch Controller allows detailed scheduled operation by the group or zone. Up to 8 weekly schedules can be set. Each schedule can include up to 40 special days.

■ **Handy Automated Control**

The intelligent Touch Controller can do the following.

· Changeover Settings : automatically switches between cooling and heating according to the room temperature.
· Setback Control : prevents the temperature from rising too high or too low in unoccupied rooms.

2.7.2 System Overview

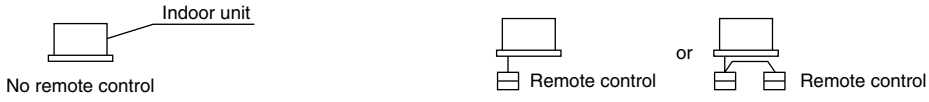
This intelligent Touch Controller is capable of controlling/monitoring up to 64 groups of indoor units (hereafter “groups”).

The main functions of the intelligent Touch Controller include:

1. Collective starting/stopping of operation of the indoor units connected to the intelligent Touch Controller.
2. Starting/stopping of operation, temperature setting, switching between temperature control modes and enabling/disabling of operation with the hand-held remote control by zone or group.
3. Scheduling by zone or group.
4. Monitoring of the operation status by zone or group.
5. Display of the air conditioner operation history.
6. Compulsory contact stop input from the central monitoring panel (non-voltage, normally-open contact).
7. Control and Monitoring of air conditioner with personal computer by the Controller (with the optional DCS004A71).

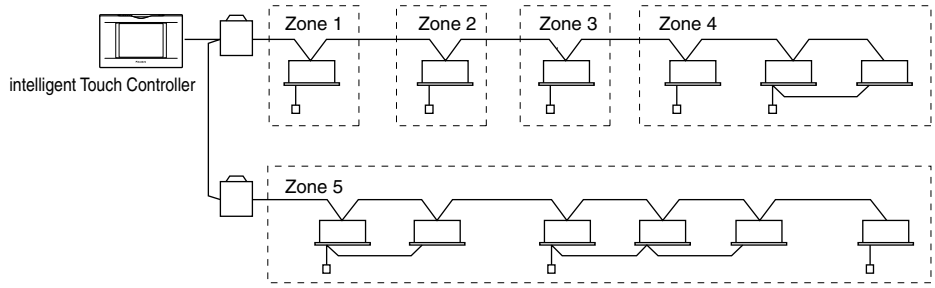
* A group of indoor units include:

① One indoor unit without a remote control. ② One indoor unit controlled with one or two remote controls.



③ Up to 16 indoor units controlled with one or two remote controls.

* Zone control with the intelligent Touch Controller
* Zone control, which allows collective settings for more than one group, is available with the intelligent Touch Controller, which facilitates the setting operations.

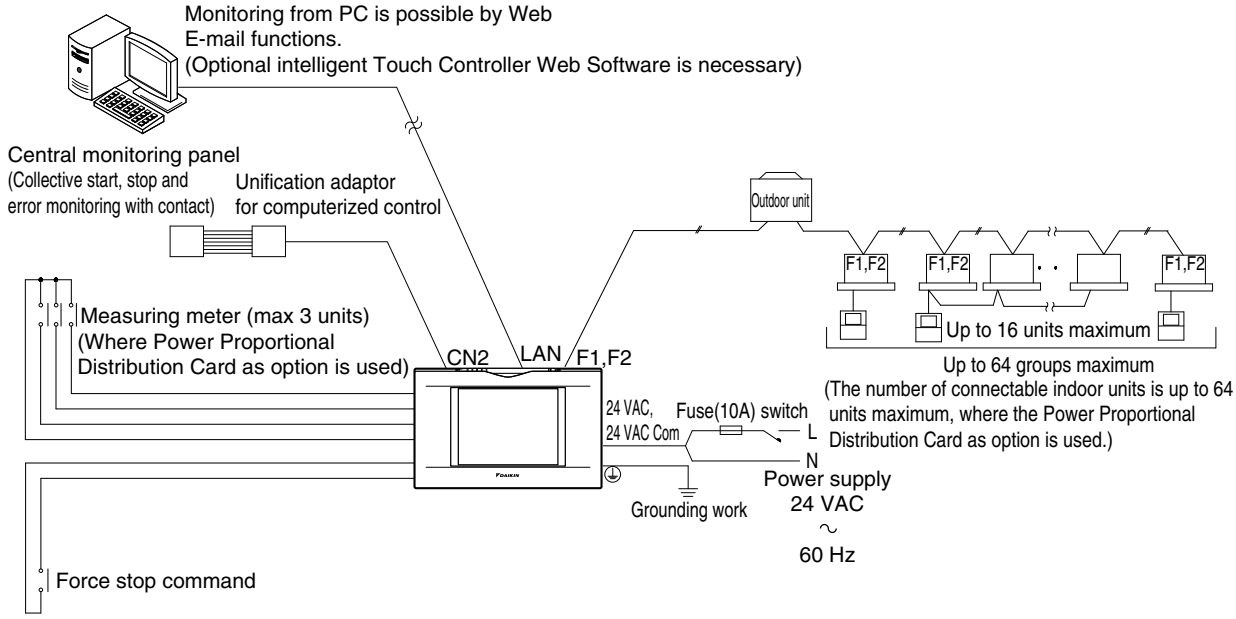


- One setting makes the same setting for all of the units in one zone.
- Up to 128 zones can be set with one intelligent Touch Controller. (The maximum number of groups in one zone is 64.)
- Groups can be zoned at will with the intelligent Touch Controller.
- Units in one group can be divided into more than one zone.

3P073677-15T

2.7.3 Options

Connecting Unification adaptor allows using the contact for normal and abnormal operation signal and collective start/stop with a contact. For details, contact the vendor you purchased the product from.

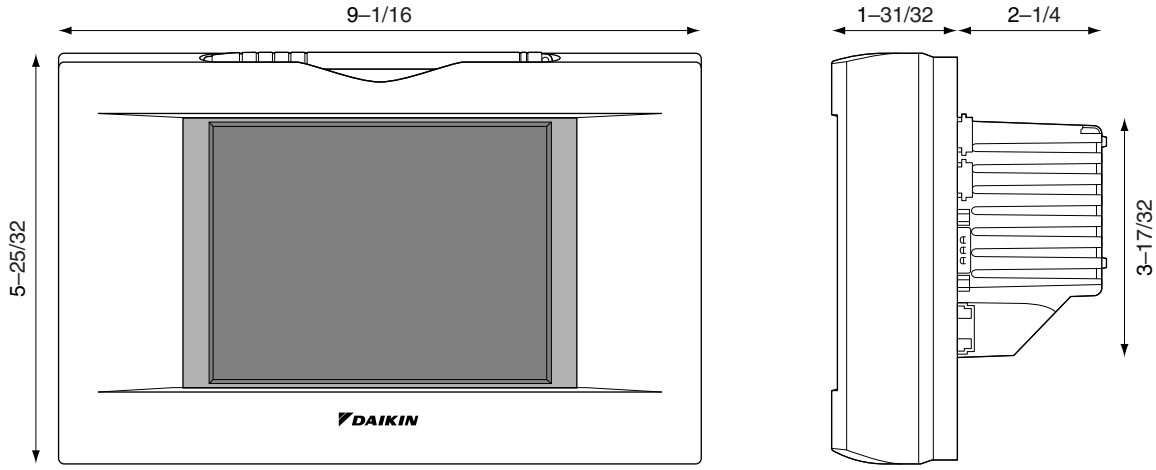


2.7.4 Specification

Specification

Power	AC24V 50/60Hz
Power consumption	10 W maximum
Force stop input	Normally-open contact Contact current approximately 10 mA
Size	9–1/16×5–25/32×4–7/32 (W×H×D)
Mass	2 lb 10 oz

Dimension



The specification and appearance of the product may be modified for improvement without prior notice.

3P073677-15T

2.7.5 Part Names and Functions

Front and Side View

PCMCIA Card Slot

Used when updating the intelligent Touch Controller software to a newer version.

Color LCD with Touch Panel

Provides a display for monitoring and operation.
Be sure to use the touch pen provided for operation.

Touch Pen

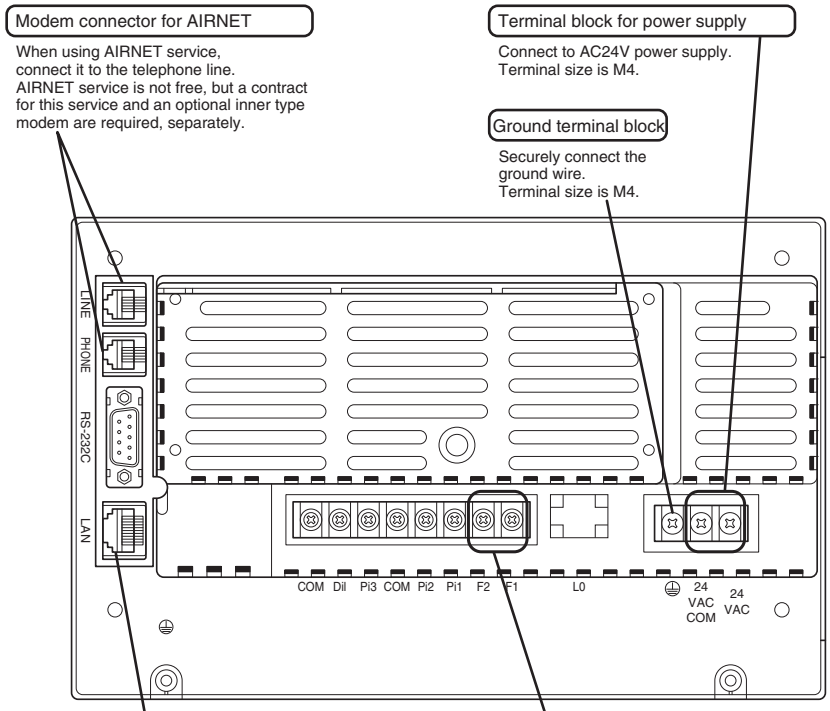
Use the touch pen for operation.
Be sure to use the touch pen for operation.
Use caution not to lose the touch pen.
(When the pen is lost, contact the dealer you purchased the product from.)

NOTE

- Be sure to use the touch pen for operation of the touch panel of the intelligent Touch Controller. Operating with an object other than the touch pen provided may cause damage and failure.

3P073677-15T

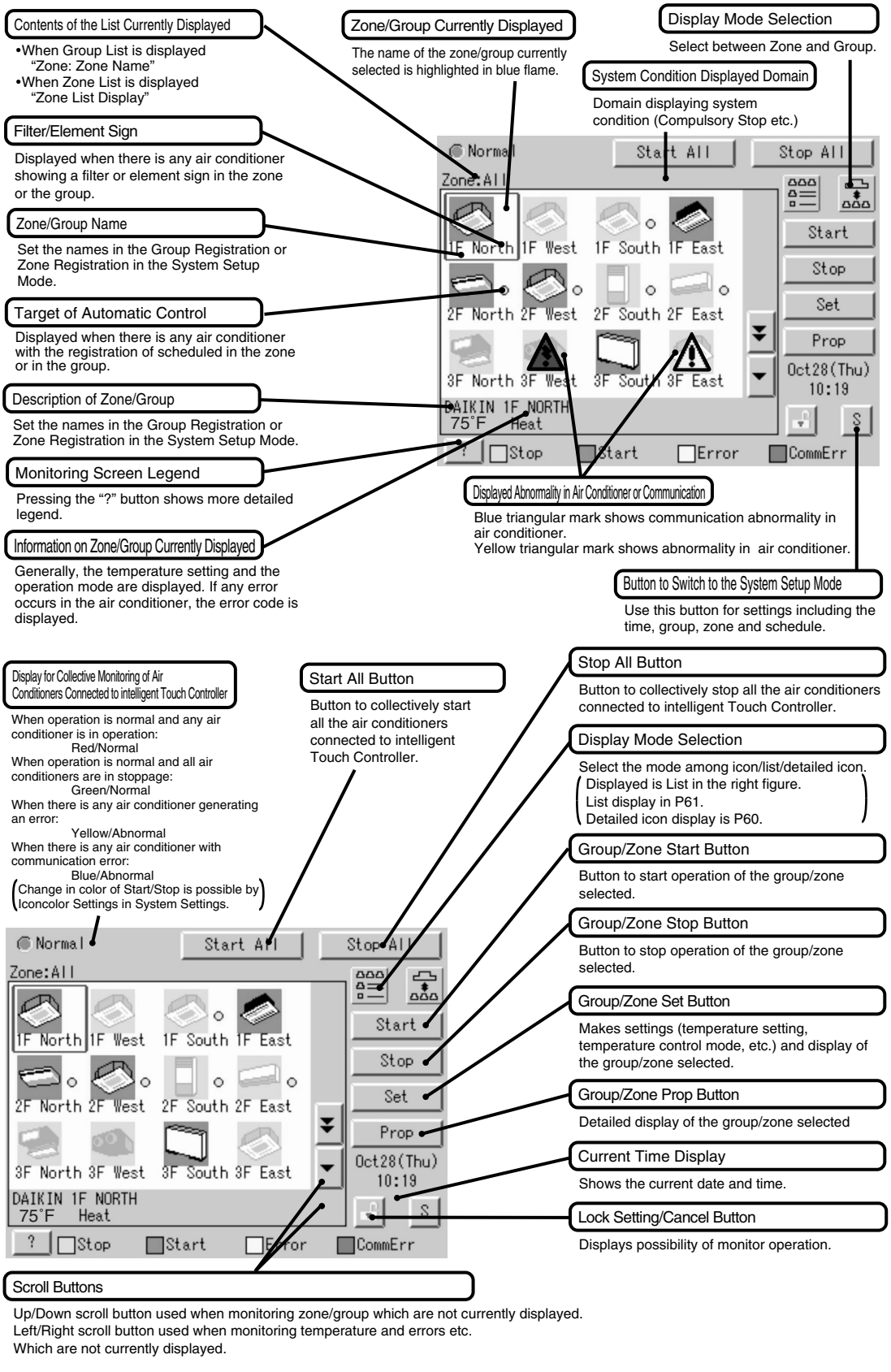
Terminals on the Back of intelligent Touch Controller

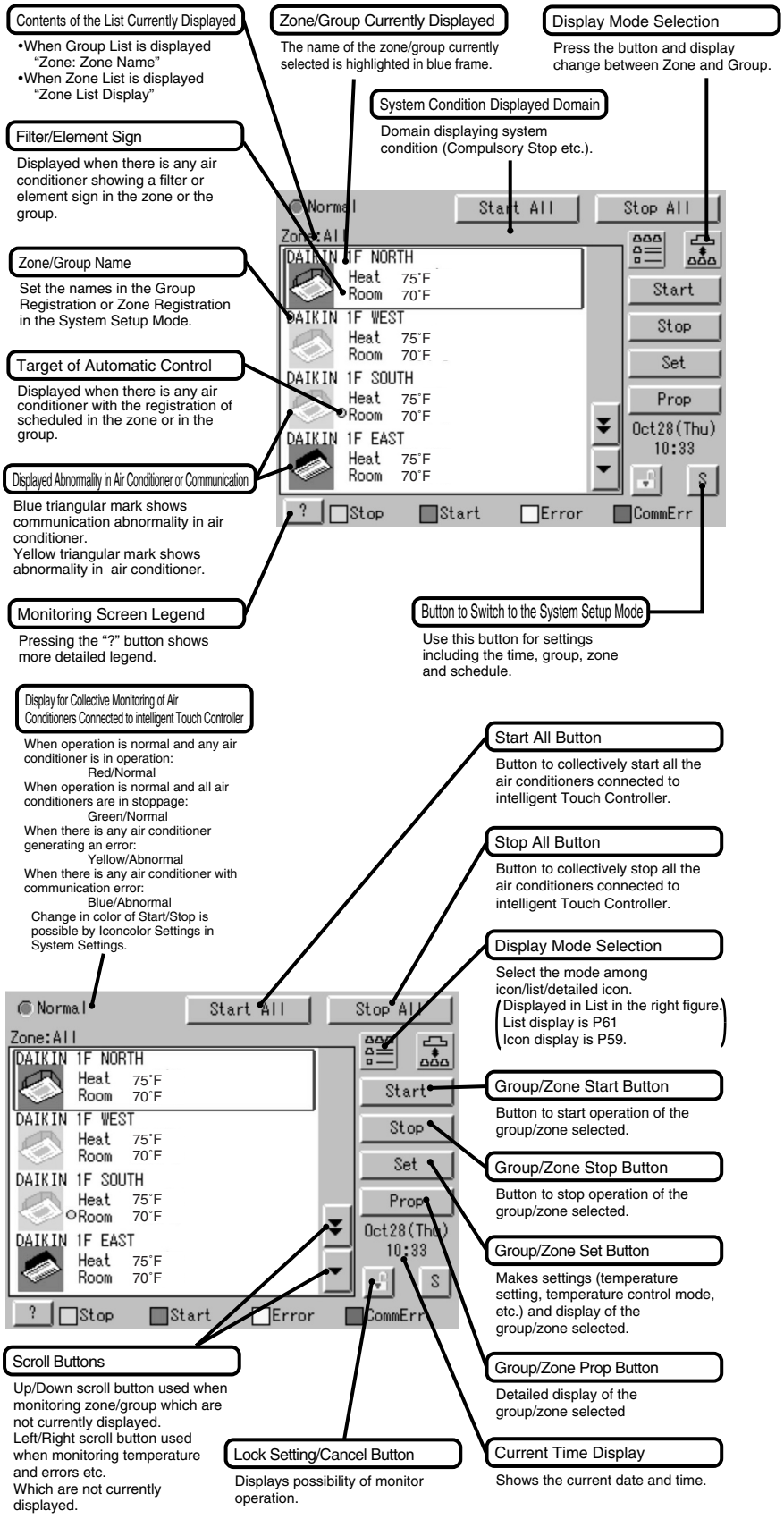

Modem connector for AIRNET
When using AIRNET service, connect it to the telephone line. AIRNET service is not free, but a contract for this service and an optional inner type modem are required, separately.
Terminal block for power supply
Connect to AC24V power supply. Terminal size is M4.
Ground terminal block
Securely connect the ground wire. Terminal size is M4.
LINE
PHONE
RS-232C
LAN
COM DII PI3 COM PI2 PI1 F2 F1 L0
24 VAC COM
24 VAC
Ethernet connector for web
When monitoring and operating the indoor units using the optional Web and E-mail function software sold separately, connect to LAN via Ethernet cable.
Terminal block for DIII-NET communication
The terminal size of the terminal block for communication with indoor units is M3.5.

3P073677-15T

2.7.6 Part Names on the Monitoring Screen and the Functions

Icon


Contents of the List Currently Displayed
•When Group List is displayed
"Zone: Zone Name"
•When Zone List is displayed
"Zone List Display"
Filter/Element Sign
Displayed when there is any air conditioner showing a filter or element sign in the zone or the group.
Zone/Group Name
Set the names in the Group Registration or Zone Registration in the System Setup Mode.
Target of Automatic Control
Displayed when there is any air conditioner with the registration of scheduled in the zone or in the group.
Description of Zone/Group
Set the names in the Group Registration or Zone Registration in the System Setup Mode.
Monitoring Screen Legend
Pressing the "?" button shows more detailed legend.
Information on Zone/Group Currently Displayed
Generally, the temperature setting and the operation mode are displayed. If any error occurs in the air conditioner, the error code is displayed.
Zone/Group Currently Displayed
The name of the zone/group currently selected is highlighted in blue flame.
Display Mode Selection
Select between Zone and Group.
System Condition Displayed Domain
Domain displaying system condition (Compulsory Stop etc.)
Normal
Start All
Stop All
Zone:All
1F North
1F West
1F South
1F East
2F North
2F West
2F South
2F East
3F North
3F West
3F South
3F East
DAIKIN 1F NORTH
75°F Heat
Start
Stop
Set
Prop
Oct28(Thu)
10:19
?
Stop
Start
Error
CommErr
Displayed Abnormality in Air Conditioner or Communication
Blue triangular mark shows communication abnormality in air conditioner.
Yellow triangular mark shows abnormality in air conditioner.
Button to Switch to the System Setup Mode
Use this button for settings including the time, group, zone and schedule.
Display for Collective Monitoring of Air Conditioners Connected to intelligent Touch Controller
When operation is normal and any air conditioner is in operation:
Red/Normal
When operation is normal and all air conditioners are in stoppage:
Green/Normal
When there is any air conditioner generating an error:
Yellow/Abnormal
When there is any air conditioner with communication error:
Blue/Abnormal
(Change in color of Start/Stop is possible by Iconcolor Settings in System Settings.
Start All Button
Button to collectively start all the air conditioners connected to intelligent Touch Controller.
Stop All Button
Button to collectively stop all the air conditioners connected to intelligent Touch Controller.
Display Mode Selection
Select the mode among icon/list/detailed icon.
(Displayed is List in the right figure.
List display in P61.
Detailed icon display is P60.
Group/Zone Start Button
Button to start operation of the group/zone selected.
Group/Zone Stop Button
Button to stop operation of the group/zone selected.
Group/Zone Set Button
Makes settings (temperature setting, temperature control mode, etc.) and display of the group/zone selected.
Group/Zone Prop Button
Detailed display of the group/zone selected
Current Time Display
Shows the current date and time.
Lock Setting/Cancel Button
Displays possibility of monitor operation.
Scroll Buttons
Up/Down scroll button used when monitoring zone/group which are not currently displayed.
Left/Right scroll button used when monitoring temperature and errors etc.
Which are not currently displayed.
EM05A058


Contents of the List Currently Displayed
•When Group List is displayed
"Zone: Zone Name"
•When Zone List is displayed
"Zone List Display"
Zone/Group Currently Displayed
The name of the zone/group currently selected is highlighted in blue frame.
Display Mode Selection
Press the button and display change between Zone and Group.
System Condition Displayed Domain
Domain displaying system condition (Compulsory Stop etc.).
Filter/Element Sign
Displayed when there is any air conditioner showing a filter or element sign in the zone or the group.
Zone/Group Name
Set the names in the Group Registration or Zone Registration in the System Setup Mode.
Target of Automatic Control
Displayed when there is any air conditioner with the registration of scheduled in the zone or in the group.
Displayed Abnormality in Air Conditioner or Communication
Blue triangular mark shows communication abnormality in air conditioner.
Yellow triangular mark shows abnormality in air conditioner.
Monitoring Screen Legend
Pressing the "?" button shows more detailed legend.
Button to Switch to the System Setup Mode
Use this button for settings including the time, group, zone and schedule.
Normal
Start All
Stop All
Zone:All
DAIKIN 1F NORTH
Heat 75°F
Room 70°F
DAIKIN 1F WEST
Heat 75°F
Room 70°F
DAIKIN 1F SOUTH
Heat 75°F
Room 70°F
DAIKIN 1F EAST
Heat 75°F
Room 70°F
Start
Stop
Set
Prop
Oct28(Thu)
10:33
S
?
Stop
Start
Error
CommErr
Display for Collective Monitoring of Air Conditioners Connected to intelligent Touch Controller
When operation is normal and any air conditioner is in operation:
Red/Normal
When operation is normal and all air conditioners are in stoppage:
Green/Normal
When there is any air conditioner generating an error:
Yellow/Abnormal
When there is any air conditioner with communication error:
Blue/Abnormal
Change in color of Start/Stop is possible by Iconcolor Settings in System Settings.
Start All Button
Button to collectively start all the air conditioners connected to intelligent Touch Controller.
Stop All Button
Button to collectively stop all the air conditioners connected to intelligent Touch Controller.
Display Mode Selection
Select the mode among icon/list/detailed icon.
(Displayed in List in the right figure.
List display is P61
Icon display is P59.)
Group/Zone Start Button
Button to start operation of the group/zone selected.
Group/Zone Stop Button
Button to stop operation of the group/zone selected.
Group/Zone Set Button
Makes settings (temperature setting, temperature control mode, etc.) and display of the group/zone selected.
Group/Zone Prop Button
Detailed display of the group/zone selected
Current Time Display
Shows the current date and time.
Scroll Buttons
Up/Down scroll button used when monitoring zone/group which are not currently displayed.
Left/Right scroll button used when monitoring temperature and errors etc.
Which are not currently displayed.
Lock Setting/Cancel Button
Displays possibility of monitor operation.

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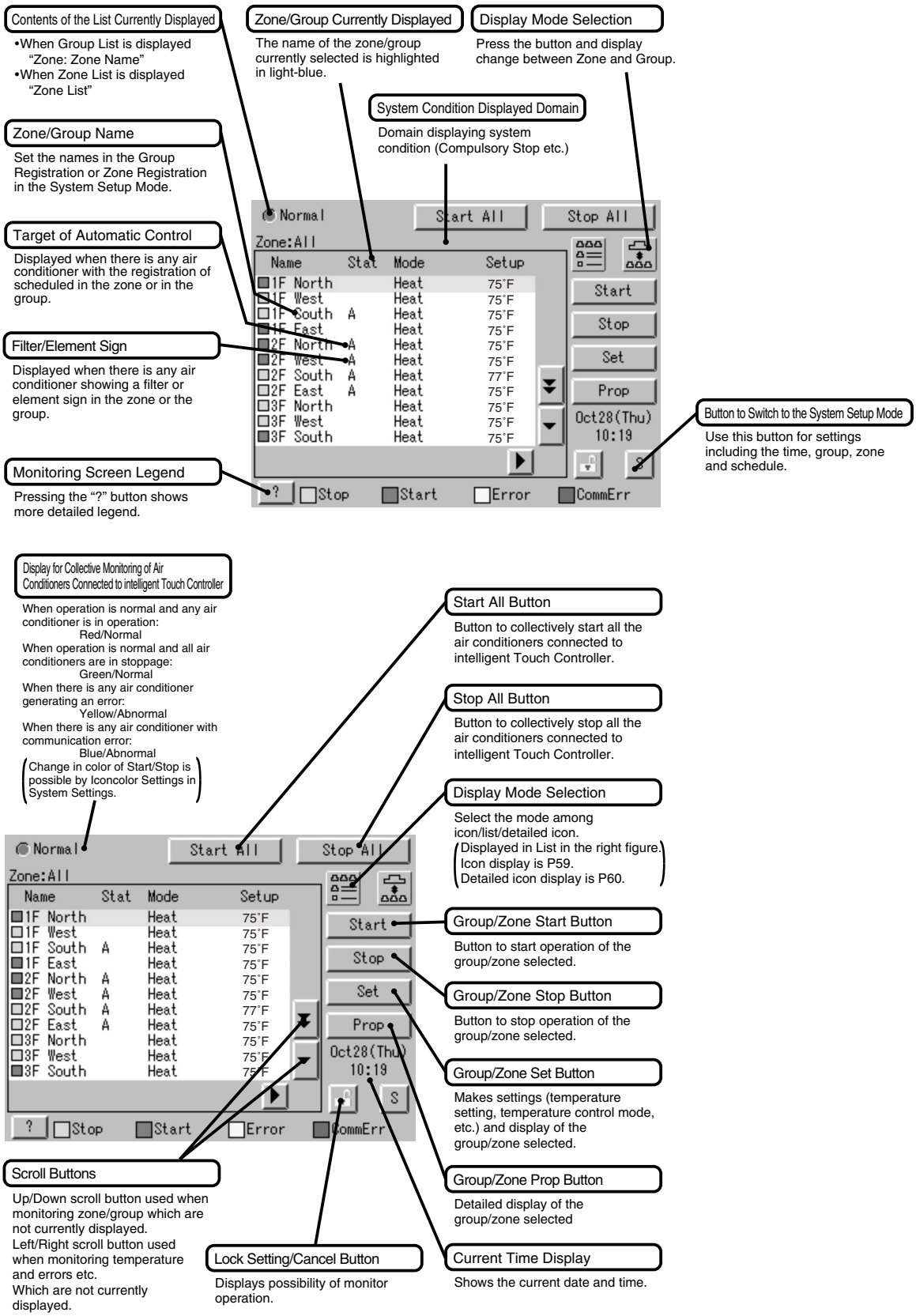
List


Contents of the List Currently Displayed
•When Group List is displayed
"Zone: Zone Name"
•When Zone List is displayed
"Zone List"
Zone/Group Currently Displayed
The name of the zone/group currently selected is highlighted in light-blue.
Display Mode Selection
Press the button and display change between Zone and Group.
System Condition Displayed Domain
Domain displaying system condition (Compulsory Stop etc.)
Zone/Group Name
Set the names in the Group Registration or Zone Registration in the System Setup Mode.
Target of Automatic Control
Displayed when there is any air conditioner with the registration of scheduled in the zone or in the group.
Filter/Element Sign
Displayed when there is any air conditioner showing a filter or element sign in the zone or the group.
Monitoring Screen Legend
Pressing the "?" button shows more detailed legend.
Button to Switch to the System Setup Mode
Use this button for settings including the time, group, zone and schedule.
Normal
Start All
Stop All
Zone:All
Name Stat Mode Setup
1F North Heat 75°F
1F West Heat 75°F
1F South A Heat 75°F
1F East Heat 75°F
2F North A Heat 75°F
2F West A Heat 75°F
2F South A Heat 77°F
2F East A Heat 75°F
3F North Heat 75°F
3F West Heat 75°F
3F South Heat 75°F
Start
Stop
Set
Prop
Oct28(Thu)
10:19
?
Stop
Start
Error
CommErr
Display for Collective Monitoring of Air Conditioners Connected to intelligent Touch Controller
When operation is normal and any air conditioner is in operation:
Red/Normal
When operation is normal and all air conditioners are in stoppage:
Green/Normal
When there is any air conditioner generating an error:
Yellow/Abnormal
When there is any air conditioner with communication error:
Blue/Abnormal
(Change in color of Start/Stop is possible by Iconcolor Settings in System Settings.
Start All Button
Button to collectively start all the air conditioners connected to intelligent Touch Controller.
Stop All Button
Button to collectively stop all the air conditioners connected to intelligent Touch Controller.
Display Mode Selection
Select the mode among icon/list/detailed icon.
(Displayed in List in the right figure.
Icon display is P59.
Detailed icon display is P60.
Group/Zone Start Button
Button to start operation of the group/zone selected.
Group/Zone Stop Button
Button to stop operation of the group/zone selected.
Group/Zone Set Button
Makes settings (temperature setting, temperature control mode, etc.) and display of the group/zone selected.
Group/Zone Prop Button
Detailed display of the group/zone selected
Current Time Display
Shows the current date and time.
Scroll Buttons
Up/Down scroll button used when monitoring zone/group which are not currently displayed.
Left/Right scroll button used when monitoring temperature and errors etc.
Which are not currently displayed.
Lock Setting/Cancel Button
Displays possibility of monitor operation.

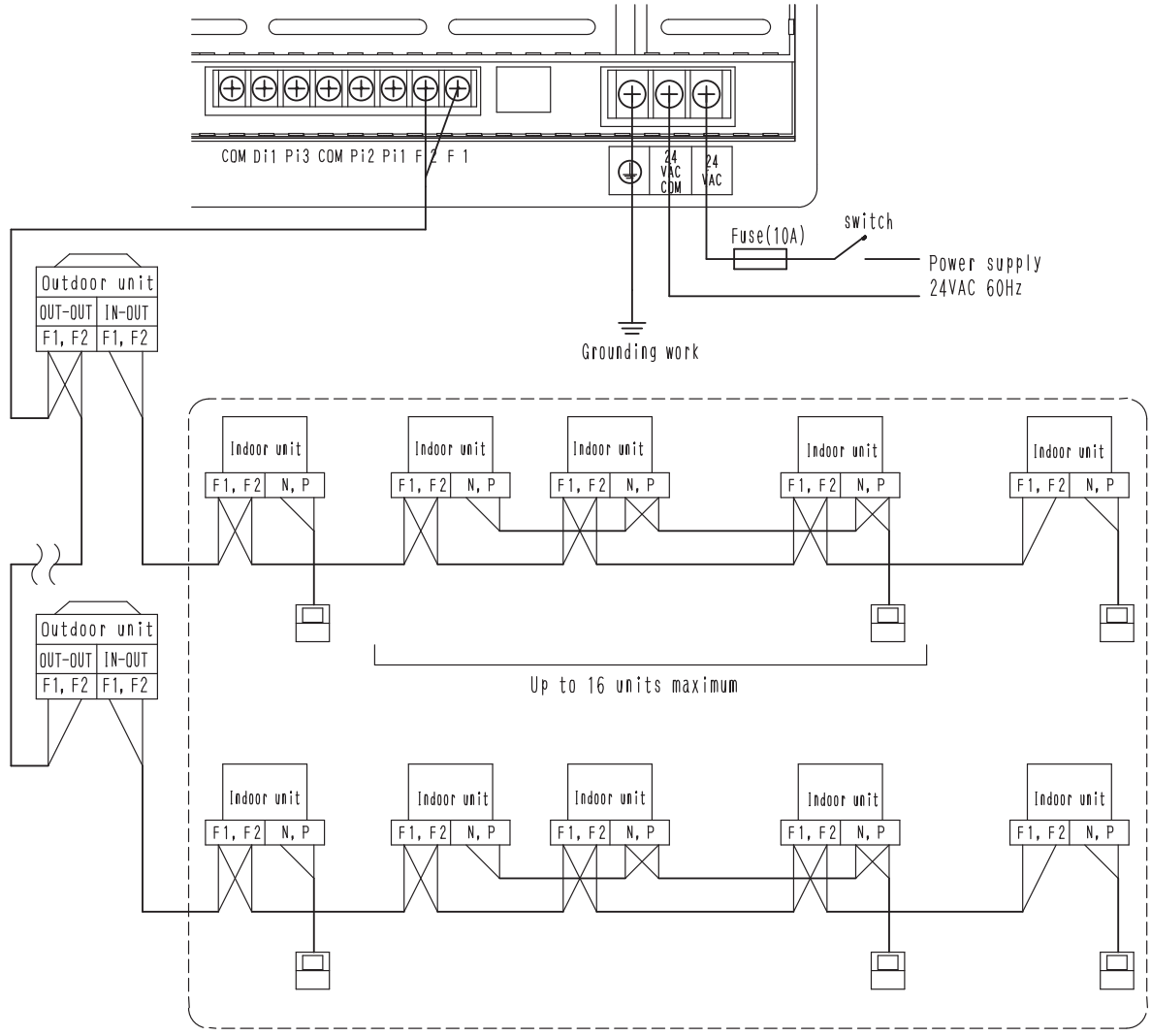
EM05A058

2.7.7 Electric Wiring Connection

When wiring, cut off the power supply (using a local switch) and do not apply power until all work has been finished.

Wiring for power supply and Connecting wiring for DⅢ-NET communication of indoor units

In order to perform centralized control of indoor units using this controller, connect the power wiring to terminals 24VAC and 24VAC COM, ground wire to ground terminal ⏚ and connecting wiring for DⅢ-NET communication of air-conditioner (indoor unit and outdoor unit) to terminals F1 and F2 respectively as shown in the sketch below.



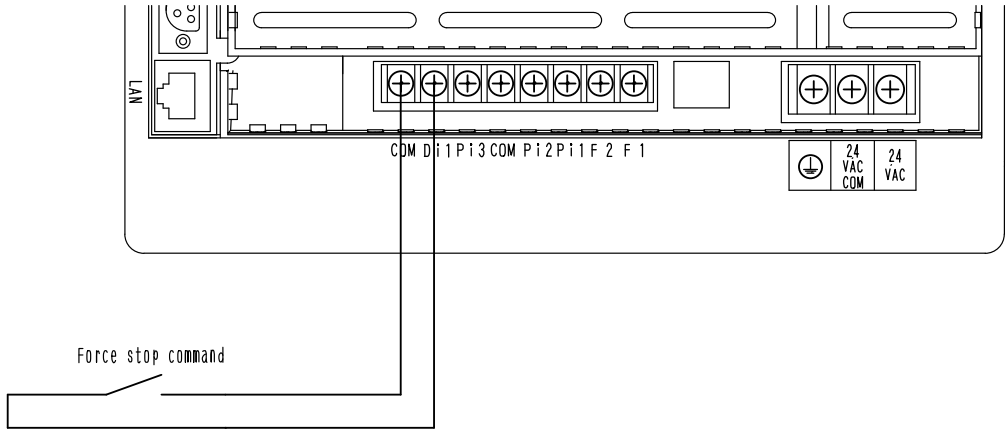
Power cable wiring	1.25mm²
Fuse	10A
Connecting wiring for DⅢ- NET communication of indoor and outdoor units	0.75 - 1.25 mm² vinyl cord or cable with sheath (2 wire) ---Up to 1000 m maximum (wiring length -- up to 2000 m maximum) For the type of electric wire, refer to the design guide.

≪ CAUTION ≫

- Don't fail to perform installation of Grounding work. Don't connect the grounding wire to any of gas pipe, city water pipe, lightning rod, and telephone grounding wire.
- Don't turn ON the power supply (front switch) until all the works are complete.
- The connecting wiring for communication of indoor and outdoor units is a connecting wiring for the control. Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
- Don't connect the power cable to F1, F2 terminal blocks. Wrong connection to these terminal blocks could result in damage and burning of the centralized control devices and of the electric parts of the indoor and outdoor units. This is very hazardous. Check each wired cable once more before turning ON the power switch.

Wiring for force stop input

In order to stop the air-conditioner through force stop input, connect the wiring for force stop input to the terminals Di1 and COM as shown in the sketch below.



Wiring for force stop input	• 0.75 – 1.25 mm^2 vinyl cord or cable with sheath (2 wire) -- up to 150m maximum • When FORCE-STOP INPUT is kept ON, the indoor units connected thereto are unable to be operated because they are force-stopped. • Use a contact which can guarantee minimum application load DC16V and 10mA. • Use an instantaneous contact of 200msec or more in current feed time, where required.

≪ CAUTION ≫

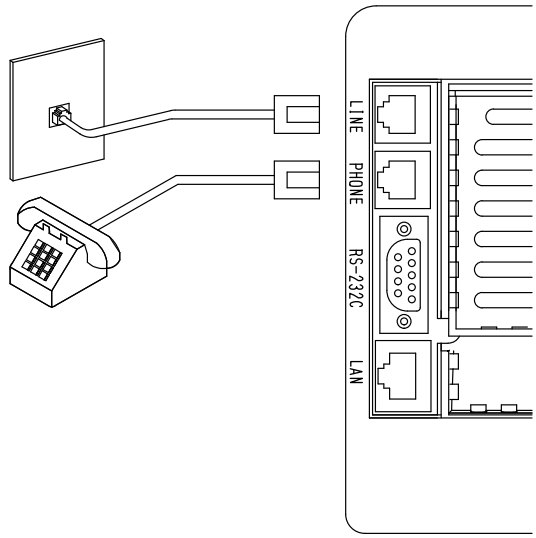
- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
- Terminals COM are inter-connected. Connecting to either one is allowed, but the number of cables connectable to one terminal is limited to 2 pieces.
- Don't connect the power cable to Di, COM terminal blocks. Wrong connection to these terminal blocks could result in damage and burning of the centralized control devices and of the electric parts of the indoor and outdoor units. This is very hazardous. Check each wired cable once more before turning ON the power switch.

Connection to public telephone line

Connect to the telephone line in order to monitor the air-conditioner via AIRNET service.
Connect to modular cable from the public telephone line to the upper connector with a stamping of LINE, and connect the modular cable of the telephone to the lower connector with a stamping of PHONE, as shown in the sketch below.

≪CAUTION≫

- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
- When using AIRNET service, it is necessary to use a separate modem specified by us and enter into Maintenance Agreement with charge.

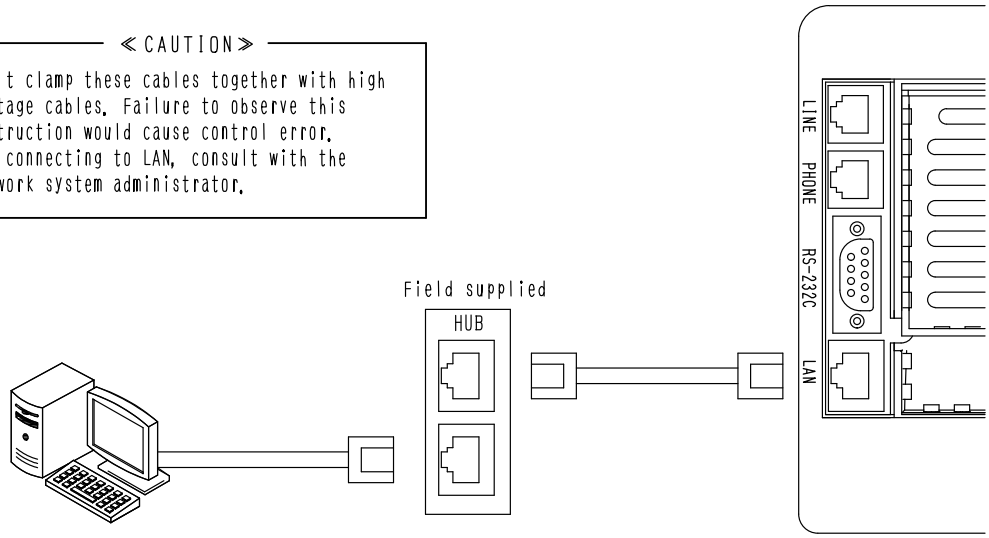


Connection to LAN

In order to monitor/control the air-conditioner using optional Web and E-mail function software sold separately, use a UTP cable to connect to LAN.
Connect the UTP cable to the Ethernet connector with a stamping of LAN.

≪CAUTION≫

- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
- For connecting to LAN, consult with the network system administrator.

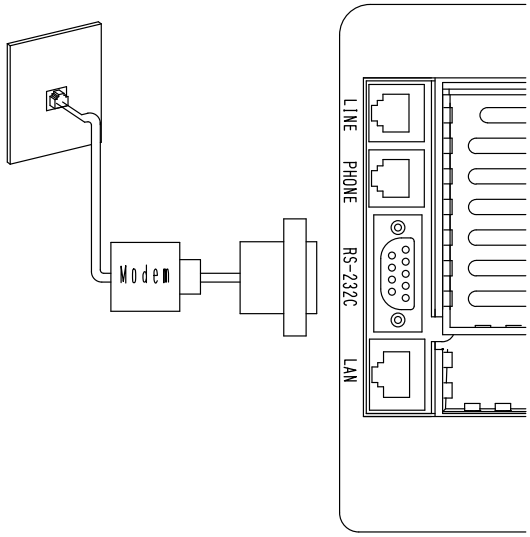


Modem connection

Connect to the telephone line in order to monitor the air-conditioner via AIRNET service.
Connect to modular cable from the public telephone line to the upper connector with a stamping of LINE, and connect the modular cable of the telephone to the lower connector with a stamping of PHONE, as shown in the sketch below.

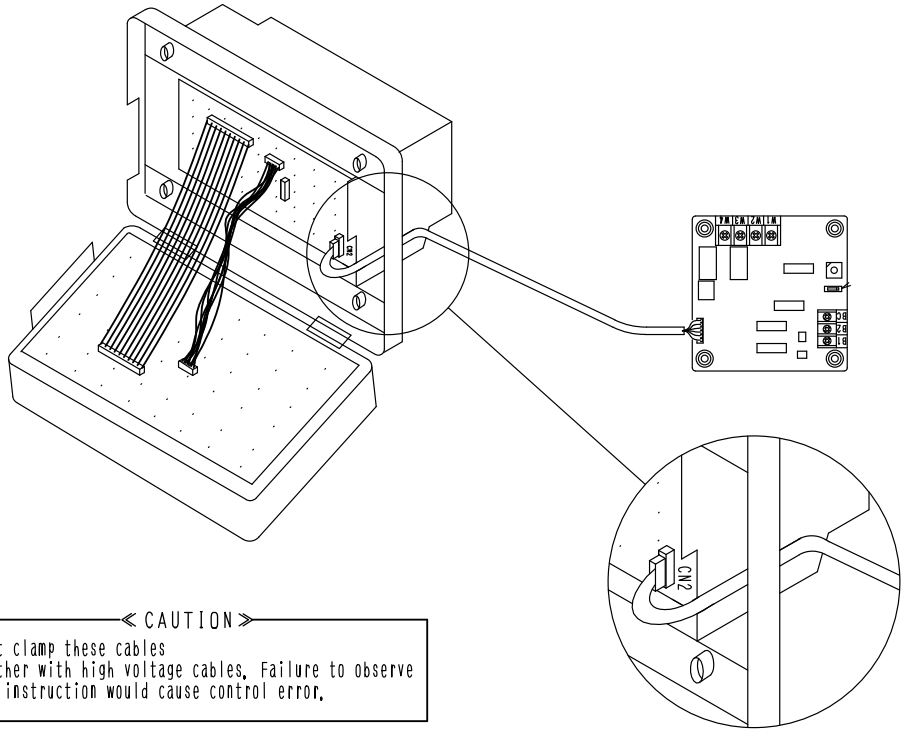
≪ CAUTION ≫

- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.
- When using AIRNET service, it is necessary to use a separate modem specified by us and enter into Maintenance Agreement with charge.



Connection for Unification Adaptor

In order to perform total start and stop/situation monitoring from central supervisory board, etc., connect a Unification Adaptor sold separately.
As shown in the sketch below, open the controller and connect the cable from the Unification Adaptor to CN2 connector located on the printed board on the lower case.
If you route the cable in the cable guide groove on the lower case, you can make a smart connection without any slack of the cable.



≪ CAUTION ≫

- Don't clamp these cables together with high voltage cables. Failure to observe this instruction would cause control error.

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2.7.8 DCS004A71 Web Software

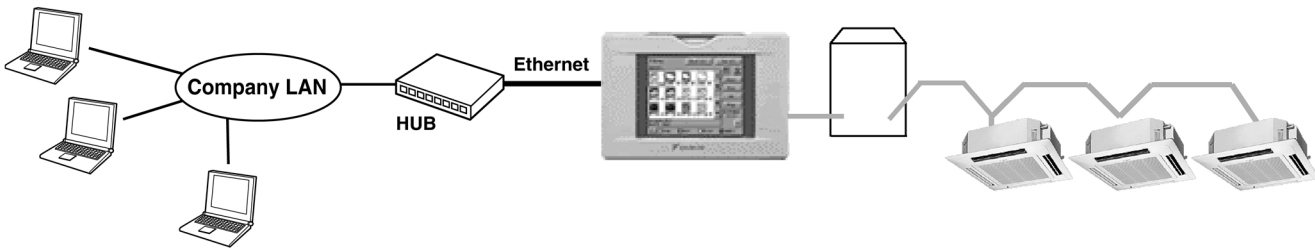
Functions and Outline

Using this software enables you to operate and monitor air conditioners linked to the intelligent Touch Controller on the Windows PC, which is connected with the intelligent Touch Controller and the Ethernet communication (LAN).

* The intelligent Touch Controller functions as a Web server to visit the Website of the intelligent Touch Controller through the Internet Explorer, which is incorporated in the PC like as its standard software, thus making it possible to operate and monitor the air conditioners.

Furthermore, through the use of a mail server, if a malfunction occurs in any of the air conditioners which are linked to the intelligent Touch Controller, it will be able to transmit mails to a pre-assigned address to alert you to the malfunction.

For further information, contact our sales representatives.



Web Interface of the intelligent Touch Controller

Permissions: Privileges Given to Each Login Name

There are two categories of login users: General User who can perform basic operations via the web interface and Administrator who can setup the system and change system settings.

Start/Stop Operation

You can start or stop all the devices in a group, a zone, or multiple zones at a time.

Advanced Settings for Air Conditioners

You can set temperature, operation modes, direction of air flow, air volume, and remote controller mode of all devices in a group, a zone, or multiple zones.

Various Operation Modes

You can operate devices from a web interface, the intelligent Touch Controller console, or a local remote controller. Also the Administrator can permit or prohibit remote controller operations of devices in a specified group or zone using the web interface.

User Administration

The Administrator can register or delete General Users, who can operate air conditioners via the web interface, and set/change his/her own password and General Users' password.

Scheduling Function

The Administrator can precisely schedule operations for a specific group or zone of devices. Weekly schedule and 10 extra schedules can be created.

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3. Adapter

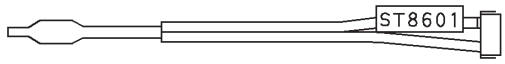
3.1 KRCS01-1B / 4B Remote Sensor

Note

● The kit modeles vary according to the model of air conditioners as follows:

KRCS01-1B	SkyAir, VRV, Other air-cooled package air conditioners, High efficiency year round cooling only air conditioners, Round-flow type is excluded.	Note 1)
KRCS01-4B	SkyAir Round-flow type	Note 2)
	VRV Round-flow type	
	Duct type, FXMQ-PVJU	
	AHU type, FXTQ-PAVJU	

Note 1) If you are unsure if this kit can be used for your indoor unit, check if the type of the thermistor (for detection of inlet air temperature) is as same as the type in this kit (ST8601).
The shape of the thermistor for detection of the indoor unit inlet air temperature is shown below.



Note 2) When installed on these models, the dehumidification by detection of humidity does not operate.

Components

Check the following components.

Designation	Remote sensor (sensor box)	Extension cable (2-core, 39ft. 4-1/2in.)	Clamps	Installation manual (this drawing)	Sensor box mounting screws (M4X4-3/4)
shape					
Pieces	1 Piece	1 Piece	2 Pieces	1 sheet	2 Pieces

1 Mounting

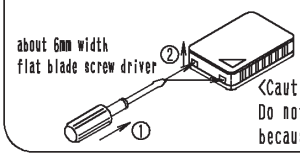
1)Selecting the mounting location

The thermistor for temperature detection is incorporated into the remote sensor. Select the mounting location taking the following cautions into account.

① where the average temperature of an air conditioned room can be detected.
② where it is not exposed to the direct sunlight.
③ where it is not influenced by other heat sources.
④ where it is not exposed to the direct discharge air from the air conditioner.
⑤ where it is not exposed to the outdoor air infiltrated into the room by opening the door.

2)Mounting

● Remove the cover of the sensor box.

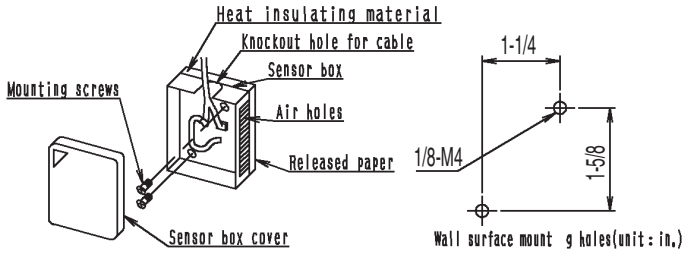


Insert a flat blade screw driver into the sensor box concave part (2 locations) and remove the cover pushing up the nail to the cover of the sensor box.

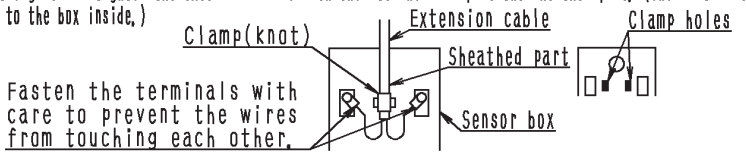
<Cautions>
Do not push the nail powerfully with a narrow flat blade screw driver, because you may break off the nail.

C:3K019189B

①When mounting on the wall

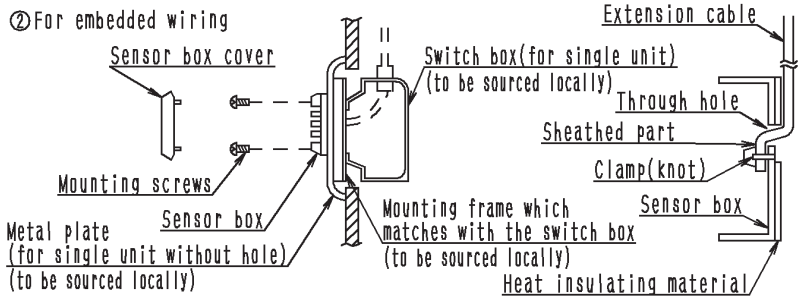


- Break open the knockout hole in the sensor with wire cutters. Pass the extension wires through the hold and fasten the wires to the terminals with screws.
- To avoid tensile force on the terminals, pass the attached clamp through the holes shown in the below right figure and tighten the extension cable with the attached clamp at the sheathed part. (The knot must come to the box inside.)

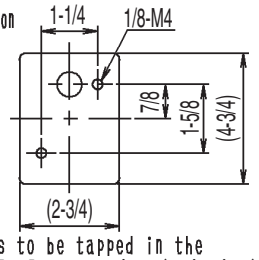


- Screw the sensor box securely to the wall surface with screws M4X16(2 places). If the sensor box cannot be screwed to wall surface, tear off the released paper and mount it on the wall surface

②For embedded wiring



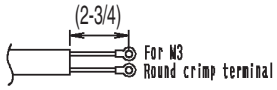
- Pass the extension cable through the switch box cable hole and carry out the wiring.
- Pass the attached clamp though the clamp holes and tighten the extension cable at the sheathed part as shown in the upper right drawing.
- Tap M4 screw holes in the metal plate (to be sourced locally) as shown in the right drawing and mount the switch box on the metal plate.



Holes to be tapped in the metal plate on site (unit:in.)

<Cautions>

- Give caution when wiring so that the air holes will not be blocked.
- When the extension cable is longer than necessary, cut it to the apporopriate length, peel the insulation, attach the round crimp terminal for M3 (to be sourced locally) and carry out the wiring. The length of insulation to be peeled off is as shown.
(Work carefully so that the connector side may not be cut.)



C:3K019189B

❷ Wiring method

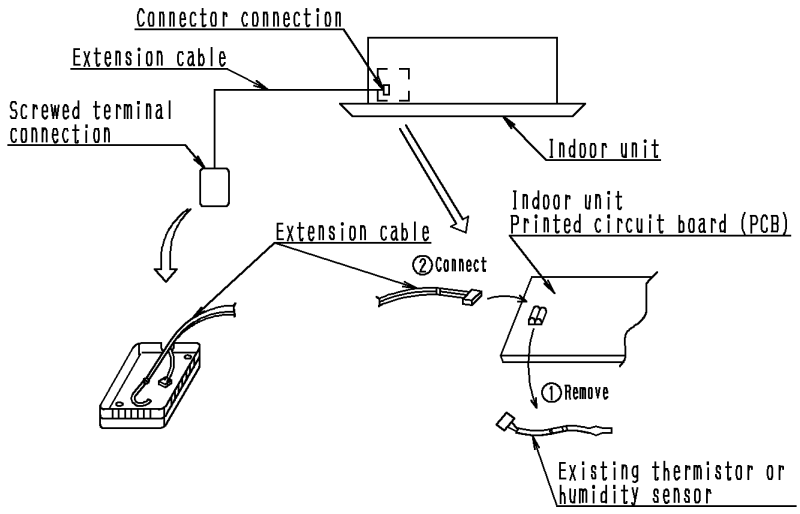
Connect the extension cable connector side to the indoor unit PCB (printed circuit board) For connection to the indoor unit, follow the procedure shown below.

⚠ Caution

1) Make sure to turn off the power supply before starting the wiring work and do not turn on until all the work is completed.
   Read also the installation manual and the wiring diagram of the indoor unit when carrying out the work.
2) When wiring the extension cable, do not pass where the extension cable may be affected by the power line or noise.
3) Make sure to securely connect the connectors.
   Defective connection may result in incorrect detection of room temperature or malfunction.
4) Do not splice wires.
5) Since the connector marking of the thermistor for detection of inlet air temperature differ depending on the indoor unit type, make sure to check the indoor unit wiring diagram and follow it correctly.
6) Lay and clamp the extension cable inside the indoor unit switch box just like the low voltage line(cord for remote controller).
   And do not pass where the extension cable inside the indoor unit switch box may be affected by the power line(cord for the indoor unit and the other electric line).

<Procedure>

1. When wiring to the indoor unit PCB, remove the existing thermistor (for detection of inlet air temperature) and then connect the extension cable.
   <For SkyAir and VRV>



2. Lay and clamp the extension cable inside the indoor unit switch box just like the existing thermistor. Provide protection of the existing cable for thermistor without affecting other components.
3. Fit the sensor box cover into the sensor box.

❸ Operation test after mounting the sensor

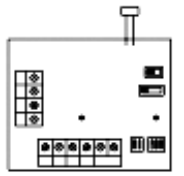
Conduct cooling and heating operation test after the sensor is mounted and the wiring is completed.

C:3K019189B

3.2 DTA104A53 / 61 / 62 External Control Adapter for Outdoor Unit (Must be Installed on Indoor Units)

Accessories Check the following accessories are included in the kit before the installation.

External control adaptor for outdoor unit



PCB support	× 4
Clamp	× 3
Installation manual	× 8

NOTES

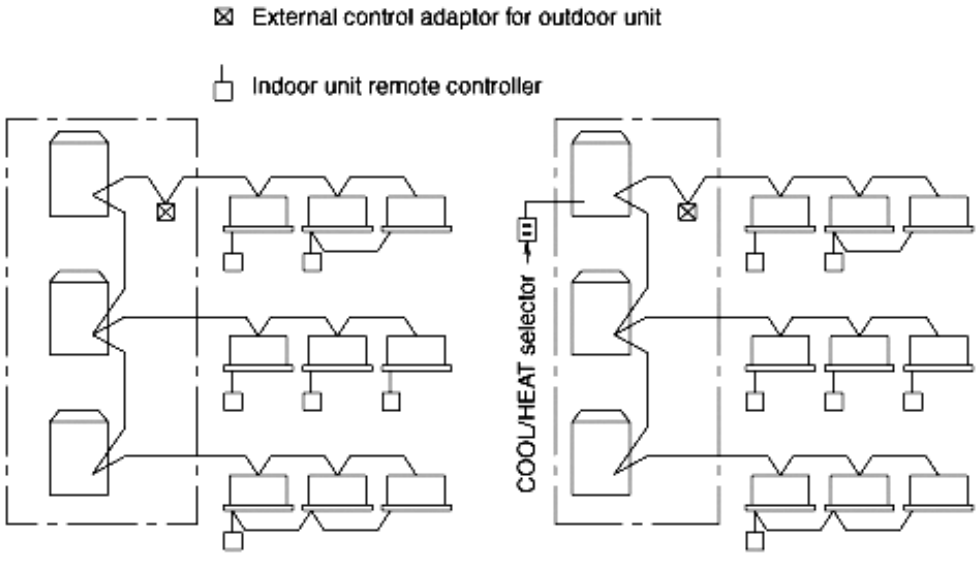
- The kit type (DTA104A61-51 type, DTA104A62-52 type, DTA104A53 type) varies according to air conditioner model.
- The installation box for adaptor PCB are required with the following air conditioner models.

FXHQ..... KRP1C93
FXMQ-P..... KRP4A96
FXFQ..... KRP1C98
FXZQ, FXDQ, FXTQ..... KRP1B101

1 General description of system

With the external control adaptor, outdoor units are controlled as follows.

1. Operation mode (COOL/HEAT/FAN) is switched simultaneously for more than one outdoor unit.
   - If switching operation mode by indoor unit remote controller or COOL/HEAT selector.
   - Except RSEY-K

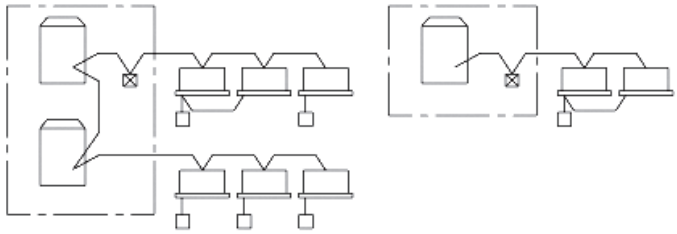


You can simultaneously switch operation mode for outdoor units in [ ].

C:1PA63164E

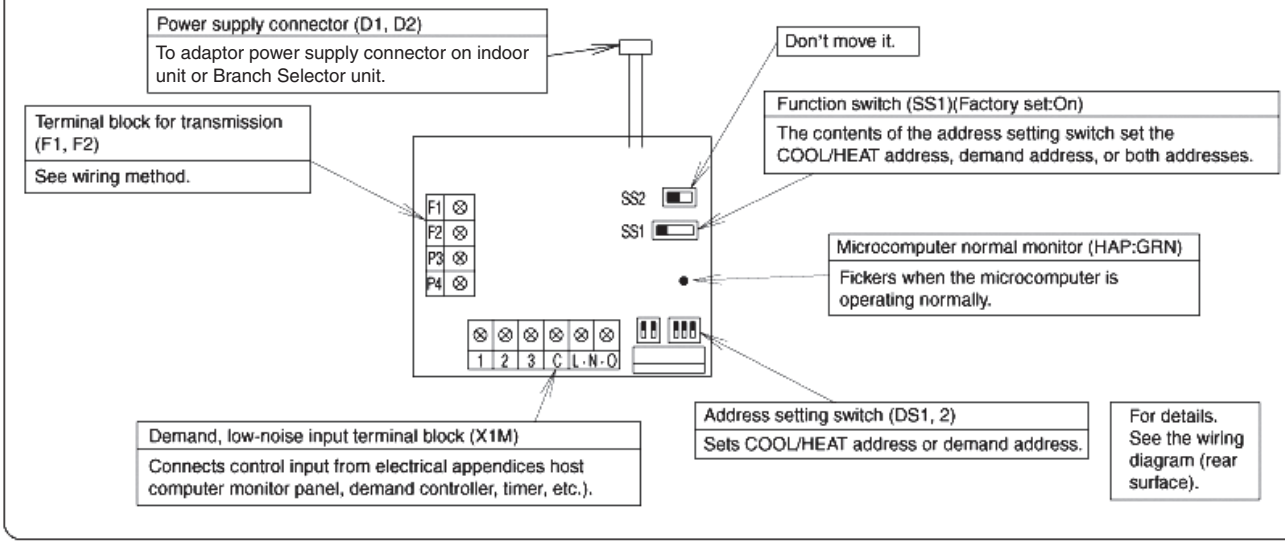
2. Demand control and low-noise control are executed simultaneously for more than outdoor unit.

• Except RSEY-K



Demand control and low-noise control are executed simultaneously for outdoor units in [ ] .

2 Names of parts and functions


Power supply connector (D1, D2)
To adaptor power supply connector on indoor unit or Branch Selector unit.
Don't move it.
Function switch (SS1)(Factory set:On)
The contents of the address setting switch set the COOL/HEAT address, demand address, or both addresses.
Terminal block for transmission (F1, F2)
See wiring method.
F1
F2
P3
P4
SS2
SS1
Microcomputer normal monitor (HAP:GRN)
Fickers when the microcomputer is operating normally.
1 2 3 C L·N·O
Demand, low-noise input terminal block (X1M)
Connects control input from electrical appendices host computer monitor panel, demand controller, timer, etc.).
Address setting switch (DS1, 2)
Sets COOL/HEAT address or demand address.
For details. See the wiring diagram (rear surface).

C:1PA63164E

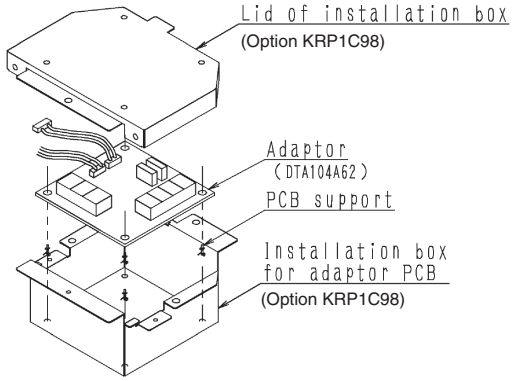
③ Installation

- Install the adaptor inside the control box of indoor unit of same refrigerant circuit.
- If installing on a Branch Selector unit, install the adaptor insie the control box of the Branch Selector unit.

《 Ceilling mounted cassette type 》

FXFQ

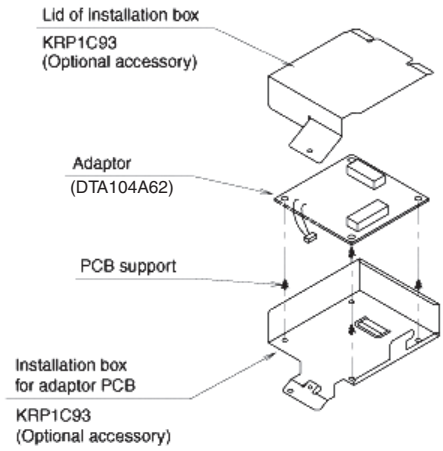
(Multiflow model)



NOTE) Installation box for adaptor PCB is required to install the adaptor.

《Ceiling suspended type》

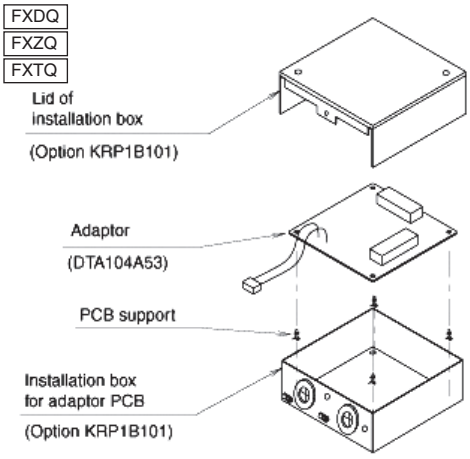
FXHQ



NOTE : Installation box for adaptor PCB is required to instsll the adaptor.

《Ceiling mounted duct type》
《Ceiling mounted cassette type (Compact multi flow)》
《Ceiling mounted AHU type》

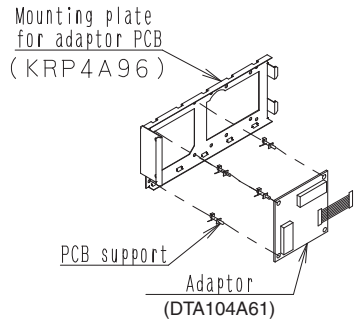
FXDQ
FXZQ
FXTQ



NOTE : Installation box for adaptor PCB is required to install the adaptor.

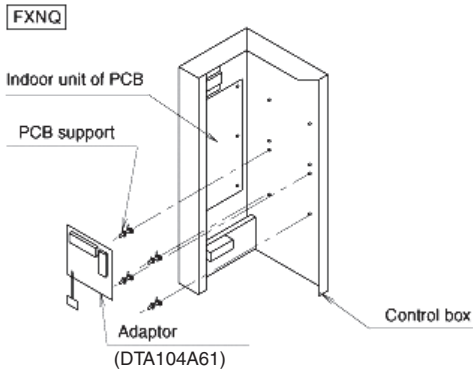
《Ceiling mounted duct type》

FXMQ~P

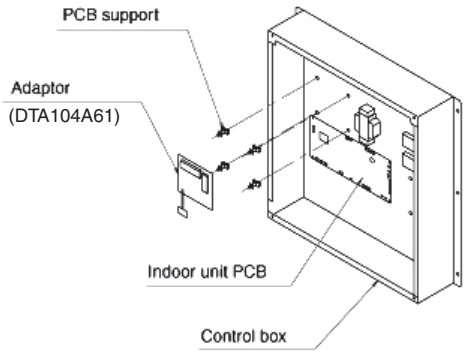


《Floor standing type》

FXLQ
FXNQ



FXMQ-M

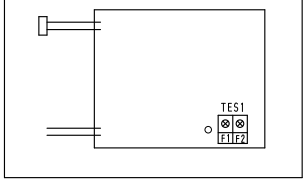


C:1PA63164E

3.3 DTA109A51 DIII-NET Expander Adapter

Accessories — Check the following accessories are included in the kit before the installation

Adaptor × 1



PCB support	× 4
Clamp	× 3
Installation Manual	× 1

NOTE This adaptor does not apply to salt damege resistsnce.

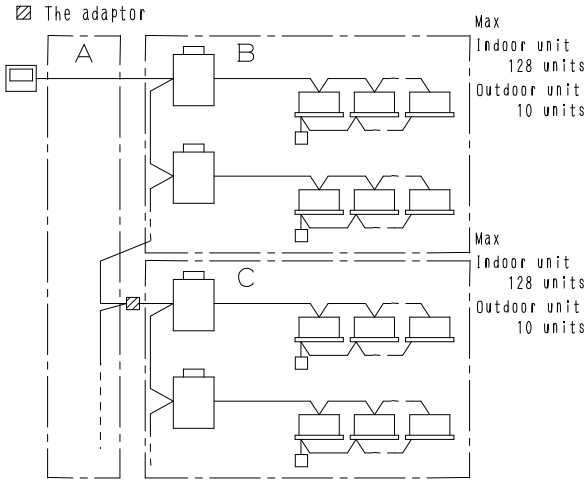
1 General description of system

The adaptor allows easy system expansion as long as restrictions are observed.

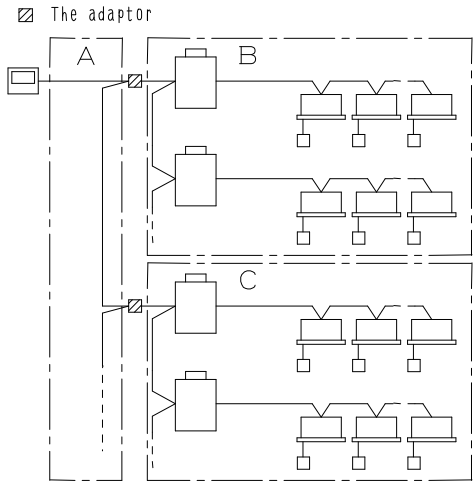
1. The below systems can be controlled on the Super Wiring System when using the adapter.

(1) Up to 1024 units can be centrally controlled in 64 different groups.
(With 2 central remote controllers, up to 1024 units can be controlled in 128 groups.)
Restrictions on the number of units that can be connected to the Super Wiring System apply to each adaptor.

(2) Wiring restrictions (max. length : 1000m, total wiring length : 2000m, max. number of branches : 16) apply to each adapter.



A maximum of 128 indoor units and 10 outdoor units can be connected in each group B and C.

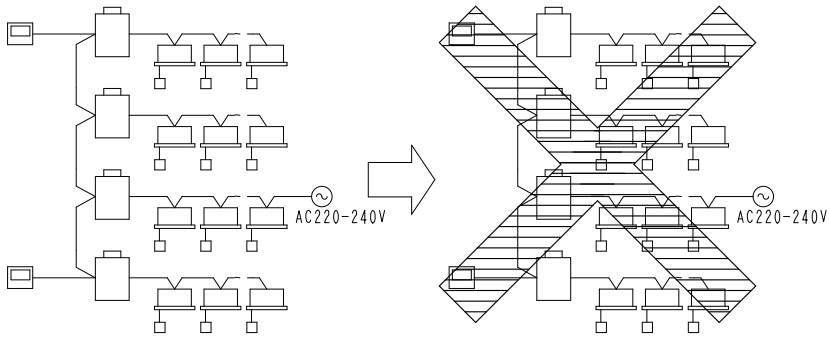


Each group A, B and C can have a maximum wiring length of 1000m, total wiring length of 2000m and a maximum 16 branches.

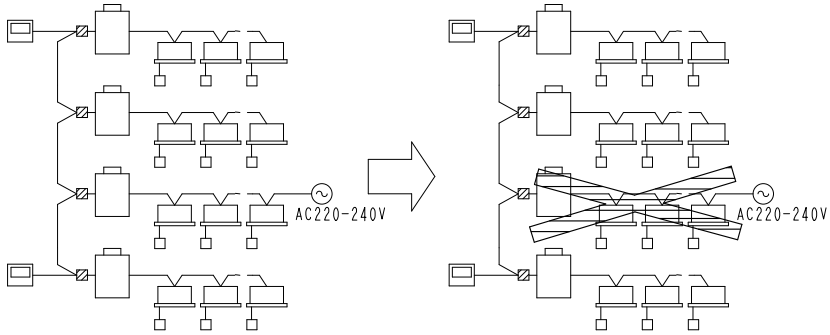
1P013360

(3)Setups risky for centralized control systems are possible.

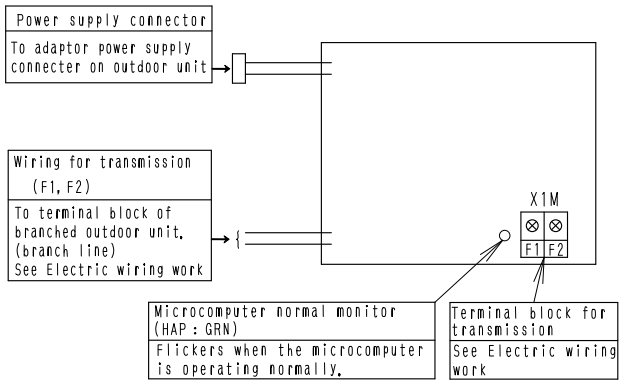
Conventional System Misswiring such as apply 220-240V to circuits could possibly shut down the entire system.



With the adaptor Should trouble occur, only units below the adapter are shut down. Thus, it is possible to avoid a total system shutdown.



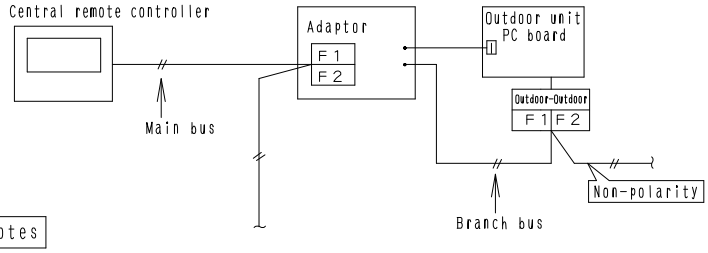
② Names of parts and functions


Power supply connector
To adaptor power supply connecter on outdoor unit
Wiring for transmission (F1, F2)
To terminal block of branched outdoor unit. (branch line)
See Electric wiring work
X1M
F1 F2
Microcomputer normal monitor (HAP : GRN)
Flickers when the microcomputer is operating normally.
Terminal block for transmission
See Electric wiring work

1P013360

❸Electric wiring work

(1)Connect the wire from the adaptor to the adaptor power connector on the outdoor unit's PC board.
(For connector Nos., see the electric wiring diagrams for the indoor and function units.)
(2)Connect transmission wires between outdoor units (Outdoor-Outdoor terminal board).
(3)Wire transmission wires to terminal boards as shown below.



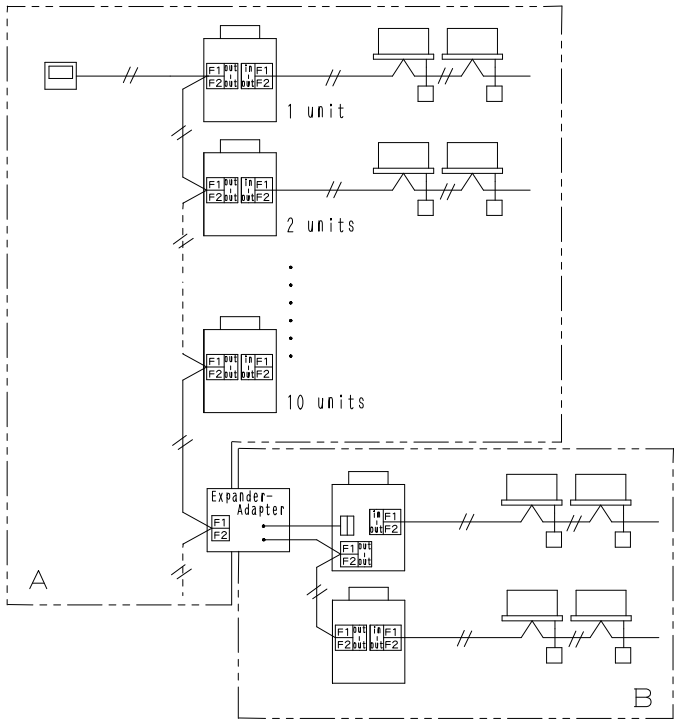
Notes

(Transmission wiring specifications)
- 0.75～1.25mm² sheathed wire (2 wire).

(Transmission wiring length)
- Observe the following limits on transmission wires. The limits apply to each adaptor. If you exceed the limits, it may cause malfunction.
  (Total length : 2000m
  Max. length…1000m
  Max. number of branches : 16)
- At least one outdoor unit and one optional controller for centralized control are required for every main bus and branch bus.
- Up to 8 adapters can be connected in one system.
- Do not locate adapters downstream of other adapters(i.e. : on a branch bus).
- If not used with a central control device, the expander adapter cannot be used with the wiring adaptor for electrical appendices(KRP2A) or the schedule timer(DST301B51).
- The external control adaptor for outdoor units controls group cooling and demand for each adaptor. (Anything beyond the expansion control falls outside the control domain.)
- Do not turn the system ON/OFF rapidly from the optional controller for centralized control. This can cause temporary erroneous displays.
- Sequential starts is controlled by each expander adaptor.

❹Wiring example

System with more than 10 outdoor units.



Note Wiring restrictions (see"Electric wiring work") apply to each group A and B.

1P013360

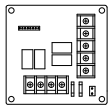
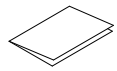
3.4 KRP1C74 / 75 Wiring Adapter

WIRING ADAPTOR INSTALLATION MANUAL

KRP1C74・75

Accessories

Check if the following accessories are included in the kit.

Name	Adaptor for wiring	Harness	PC board support	Clamp	Installation manual
Shape					
Quantity	1	1	4	4	1

Notes

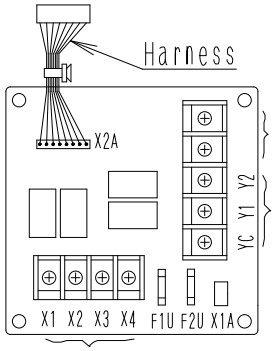
- Kits vary according to applicable models.
- A special adaptor fixing plate and box are required for the following models.

FXHQ ・・・KRP1C93
FXMQ-P ・・・KRP4A96
FXFQ ・・・KRP1C98
FXDQ, FXZQ, FXTQ ・・・KRP1B101

< Caution >

- All wiring must be performed by an authorized electrician.
- For electric wiring work, refer to also "Wiring diagram" attached to the control box lid and this manual.
- All wiring must be worked after shutting down power supply.
- All field supplied parts and materials and electric works must conform to local codes.
- A circuit breaker capable of shutting down power supply to the entire system must be installed.

1 NAMES OF PARTS



This function can not be used.

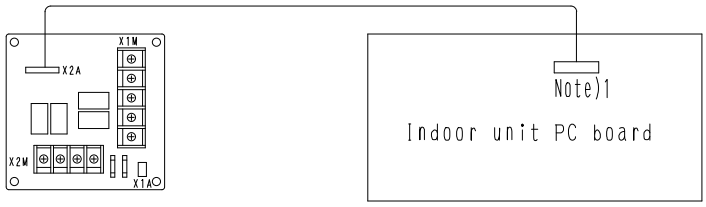
Terminals for controlling external heater, humidifier, and other equipment.

Terminals for operation status

C:2P263038A

2 ELECTRIC WIRING

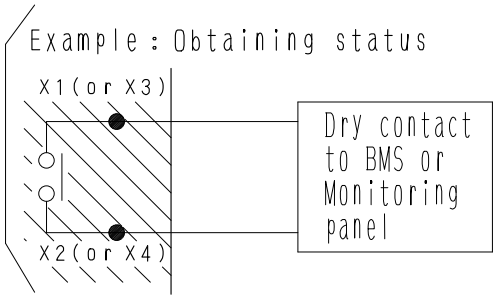
- Refer to the WIRING DIAGRAM attached to the indoor unit before attempting to wire.
  〔Make sure wires to units do not pass over the PC board when wiring.〕
- Wire the adaptor to the indoor unit as shown below.

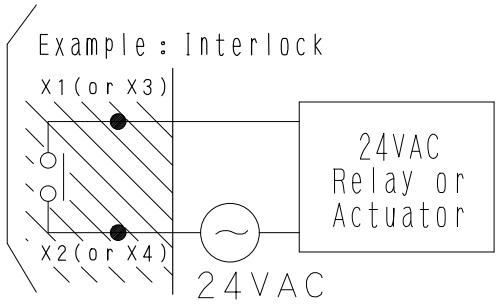


Note)1 Connector No.
X16A: FXLQ, FXNQ, FXMQ~M, FXDQ, FXFQ
FXHQ, FXZQ
X33A: FXTQ, FXMQ~P

① Thermo-ON and Fan ON status

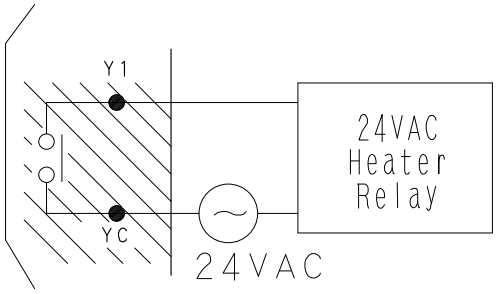
- Thermo-ON status
  Contact terminals X1 and X2 close while the indoor unit is Thermo-ON (call for cooling or heating)
- Fan ON status
  Contact terminals X3 and X4 close when indoor unit fan is ON

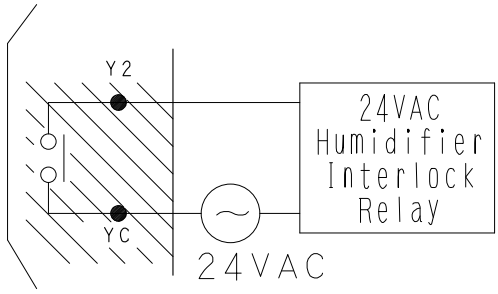




② Interlocking Heater and Humidifier

- Heater output
  - Auxiliary heater output with heat pump heating
  - Primary heater output when heat pump lockout enabled
- Humidifier output
  - Energized while heating Thermo-ON (call for heating)





C:2P263038A

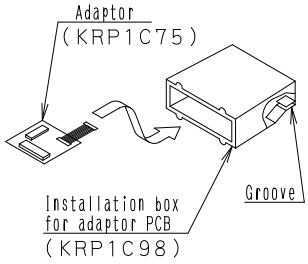
③ INSTALLATION

- Installation differs according to models as shown below.
- Do not bundle low and high voltage wires together.
- Bundle any excess wires with the attached clamps so as to keep loose wires off the indoor unit PC board.

《Ceiling mounted cassette type》

FXFQ

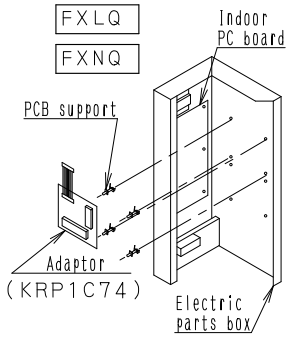
Insert the edge of the adaptor into the groove in the adaptor box.



《Floor-standing type》

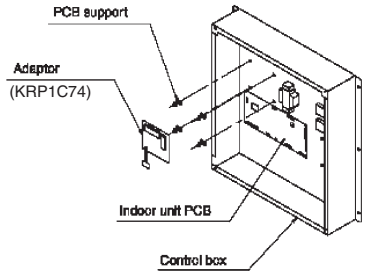
FXLQ

FXNQ



《Ceiling mounted duct type》

FXMQ~M

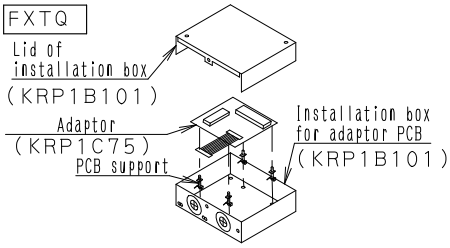


《Ceiling mounted duct type》
《Ceiling mounted cassette type(Compact multi flow)》
《Ceiling mounted AHU type》

FXDQ

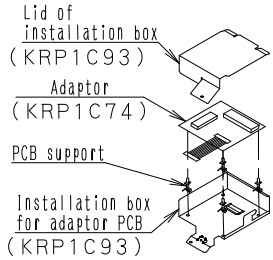
FXZQ

FXTQ



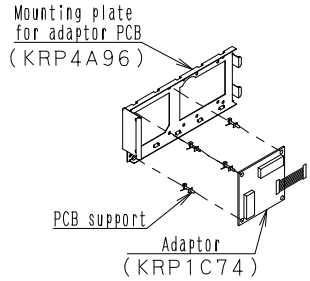
《Ceiling suspended type》

FXHQ



《Ceiling mounted duct type》

FXMQ~P



C:2P263038A

3.5 KRP4A71 / 72 / 73 / 74 Group Control Adapter

Daikin Air Conditioner

Wiring adaptor for electrical appendices (Group control adaptor)
Installation manual **KRP4A71 • 72 • 73 • 74**

Accessories Check if the following accessories are included in the kit.

Adaptor	Relay harness
× 1	(1) × 1 each (2)

PCB support	× 4
Clamp	× 3
Installation manual	× 1

NOTES
- Kits vary according to applicable models.
- A special adaptor fixing plate and box are required for the following models.

FXHQ..... KRP1C93
FXMQ-P..... KRP4A96
FXFQ..... KRP1C98
FXZQ, FXDQ, FXTQ..... KRP1B101
FXAQ..... KRP4A93

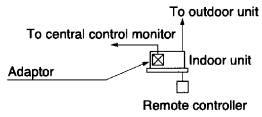
1 SYSTEM OUTLINE

This kit enables remote control (ON/OFF control, temperature setting, operation display, error display) and can be used with the following systems though it cannot be used in conjunction with other optional controllers for centralized control.

1. Individual control (Each indoor unit is controlled individually.)

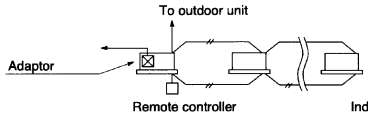
This system requires the following parts.
- Adaptor..... KRP4A71 • 72 • 73 • 74 Any one kit
- Remote controller..... BRC1E71 (For operation control)

(Ex.) When individually controlling 8 FXFQ12MVJU units
KRP4A71 × 8 kits
BRC1E71 × 8 kits

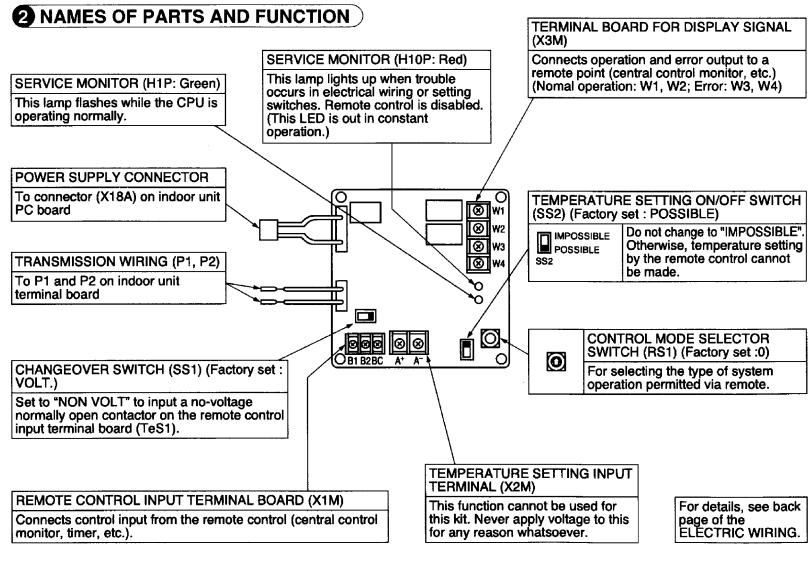


2. Group control (Multiple indoor units are controlled as a group.)

This system requires the following parts.
- Adaptor..... KRP4A71 • 72 • 73 • 74 Any one kit
- Remote controller (For operation control)..... BRC1E71



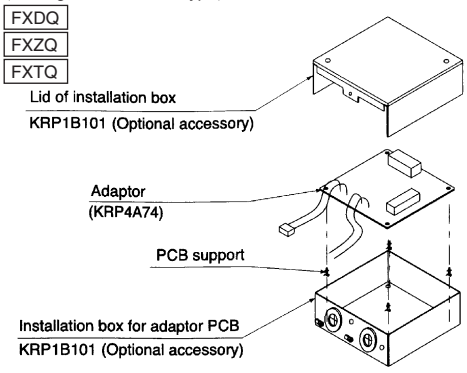
2 NAMES OF PARTS AND FUNCTION


TERMINAL BOARD FOR DISPLAY SIGNAL (X3M)
Connects operation and error output to a remote point (central control monitor, etc.) (Nomal operation: W1, W2; Error: W3, W4)
SERVICE MONITOR (H10P: Red)
This lamp lights up when trouble occurs in electrical wiring or setting switches. Remote control is disabled. (This LED is out in constant operation.)
SERVICE MONITOR (H1P: Green)
This lamp flashes while the CPU is operating normally.
POWER SUPPLY CONNECTOR
To connector (X18A) on indoor unit PC board
TRANSMISSION WIRING (P1, P2)
To P1 and P2 on indoor unit terminal board
TEMPERATURE SETTING ON/OFF SWITCH (SS2) (Factory set : POSSIBLE)
IMPOSSIBLE
POSSIBLE
SS2
Do not change to "IMPOSSIBLE". Otherwise, temperature setting by the remote control cannot be made.
W1
W2
W3
W4
B1 B2 C A* A*
CONTROL MODE SELECTOR SWITCH (RS1) (Factory set :0)
For selecting the type of system operation permitted via remote.
CHANGEOVER SWITCH (SS1) (Factory set : VOLT.)
Set to "NON VOLT" to input a no-voltage normally open contactor on the remote control input terminal board (TeS1).
TEMPERATURE SETTING INPUT TERMINAL (X2M)
This function cannot be used for this kit. Never apply voltage to this for any reason whatsoever.
REMOTE CONTROL INPUT TERMINAL BOARD (X1M)
Connects control input from the remote control (central control monitor, timer, etc.).
For details, see back page of the ELECTRIC WIRING.

❸ INSTALLATION

《Ceiling mounted duct type》
《Ceiling mounted cassette type (Compact multi flow)》
《Ceiling mounted AHU type》

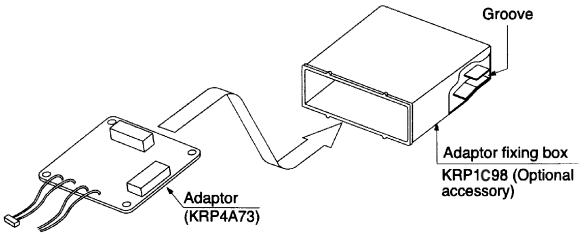
FXDQ
FXZQ
FXTQ



NOTE: Installation box for adaptor PCB is required to install the adaptor.

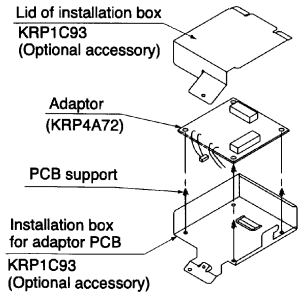
《**Ceiling mounted cassette type**》

FXFQ (Fit the edge of the adaptor PCB into the grooves on the adaptor box.)



《**Ceiling suspended type**》

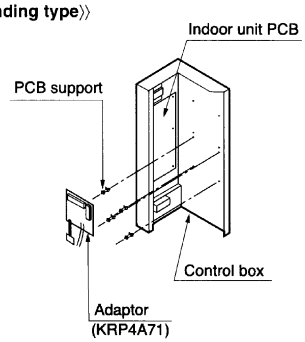
FXHQ



NOTE: Installation box for adaptor PCB is required to install the adaptor.

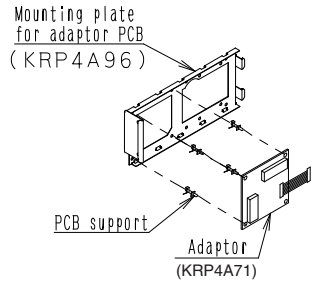
《**Floor standing type**》

FXLQ
FXNQ



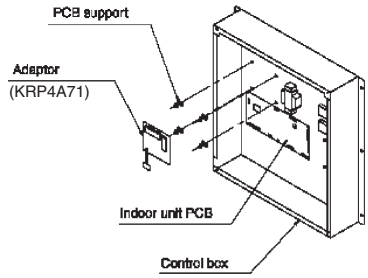
《Ceiling mounted duct type》

FXMQ~P



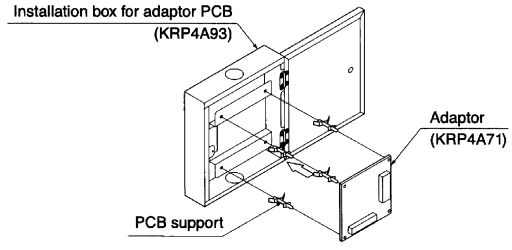
《**Ceiling mounted duct type**》

FXMQ-M



《**Wall mounted type**》

FXAQ



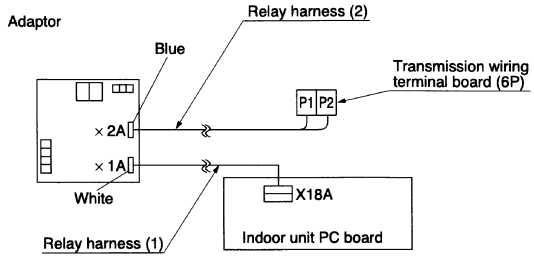
C:1P161220

4 ELECTRIC WIRING

① First, wire between the indoor and outdoor units, and then to the separate power sources, and finally between the indoor units and the remote controllers. Then, check if they operate properly.
(If wiring for group control by remote controller, check crosswires.)
For details, see the installation manual of the indoor and outdoor units.

② Next, wire between outside units such as the central control monitor, etc. and make the necessary settings.
For details, see Wiring to outside units (central control monitor) .

Wiring to indoor units



Make connections as shown above, using the attached relay harnesses (1) and (2).
- Connect relay harness (1) to the connector (X18A) on the indoor unit PC board.
- Relay harness (2) has no polarity. Connect it to terminals P1 and P2 on the transmission wiring terminal board inside the indoor unit electric parts box.

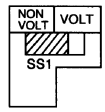
Wiring to outside units (central control monitor)

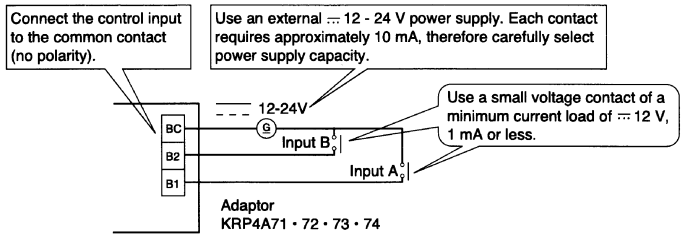
1. Remote control input (operation control)

Wire as described below. Wiring differs depending on whether using a voltage or no-voltage input.

For voltage input

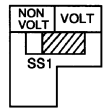
Set the changeover switch (SS1) to "VOLT". (Factory set : VOLT)

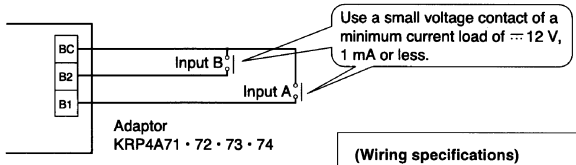



Connect the control input to the common contact (no polarity).
Use an external ⎓ 12 - 24 V power supply. Each contact requires approximately 10 mA, therefore carefully select power supply capacity.
12-24V
BC
B2
B1
Input B
Input A
Use a small voltage contact of a minimum current load of ⎓ 12 V, 1 mA or less.
Adaptor
KRP4A71 • 72 • 73 • 74

For NON VOLT input

Set the changeover switch (SS1) to "NON VOLT".





(Wiring specifications)
Wiring ... Sheathed vinyl cord or cable
Gauge ... AWG24-16
Length ... Max. 490 ft

〈NOTE〉
Keep transmission wiring away from power supply wiring to avoid malfunctions.

2. Setting the control mode selector switch (RS1)

Using the control mode selector switch (RS1), select the control mode as described below.

(Factory set)
"0" position

① For specifying individual display

Position	Function
0	Individual display (input ignored)

② When operating the unit with constant input at input A

Position	Function	When input A is ON	When input A is OFF
1	ON/OFF control impossible by remote controller	Operation (normally ON/OFF control impossible by remote controller	OFF + ON/OFF control impossible by remote controller
2	Centralized	Operation + ON/OFF control possible by remote controller	
3	OFF control possible by remote controller	Operation + OFF control possible by remote controller (ON control impossible by remote controller)	
4	ON/OFF control possible by remote controller	ON/OFF control possible by remote controller (Operation impossible by optional controller)	

〈Note〉
- Input B is for forced ON/OFF input. When input B is ON, OFF control is possible but ON/OFF control by the remote controller is impossible, and input A is igored. When it is OFF, input A is ignored even if selected. It is necessary to reselect input A.

③ When operating the unit using instantaneous input at input A
(Use an instantaneous input of 200 msec or longer ON time.)

Position	Function	Input A	Input B capacity
5	ON/OFF control impossible by remote controller	Turns OFF system with On input Turns ON system with ON input	Input B is for forced OFF input (when ON, OFF control is possible but ON/OFF control by remote controller is impossible, and input A is ignored).
6	Individual	Turns OFF system with ON input Turns ON system with ON input (Normally ON/OFF control possible by remote controller)	

★ For thermostat control using input B

Position	When input A is ON	When input B is ON
C	ON/OFF control impossible by remote controller (Same as position 5)	Forced thermostat OFF command
D		Energy saving command (✻)
E	Individual (Same as position 6)	Forced thermostat OFF command
F		Energy saving command (✻)

- Forced thermostat OFF command
  Indoor unit fan only operates.
- Energy saving command (✻)
  The indoor unit operates at 4°F higher (cooling)/lower (heating) the set temperature.

〈Notes〉
- In such case, even if input A is ON, thermostat control is turned OFF, and all units in the same group will stop.

④ When operating the unit using instantaneous input at input A and B
(Use an instantaneous input of 200 msec or longer ON time).

Position	Function	When input A is ON	When input A is OFF
7	ON/OFF control impossible by remote controller	Operation (normally ON/OFF control impossible by remote controller	OFF + ON/OFF control impossible by remote controller
8	Centralized	Operation + ON/OFF control possible by remote controller	
9	OFF control possible by remote controller	Operation + OFF control possible by remote controller (ON control impossible by remote controller)	
A	ON/OFF control possible by remote controller	ON/OFF control possible by remote controller (Operation impossible by optional controller)	
B	Individual	Operation (normally ON/OFF control possible by remote controller)	OFF (normally ON/OFF control possible by remote controller)

〈Notes〉
- When set to position 7-A, and using the constant mode for input B, forced stop capacity is enabled (input A is ignored).
- At position B, the constant mode for input B is not used.

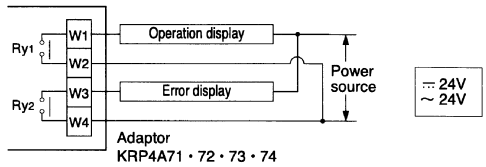
3. Cancelling display signals

Operation output terminals (W1 and W2) and error output terminals (W3 and W4) are no-voltage normally constant contacts.

(Allowed electric current per contact is between 10 mA and 3 A.)

Normal operation output (Ry1)
ON when the indoor unit is operating normally.

Error output (Ry2)
ON when the indoor unit stops because of malfunction or when a transmission error occurs between the adaptor and the indoor unit.



Display output is as described below.

Output	Both Ry1 and Ry2 OFF	Only Ry1 ON	Only Ry2 ON
Display	OFF	Normal operation	System stopped due to malfuction or transmission error generated between adaptor and indoor unit

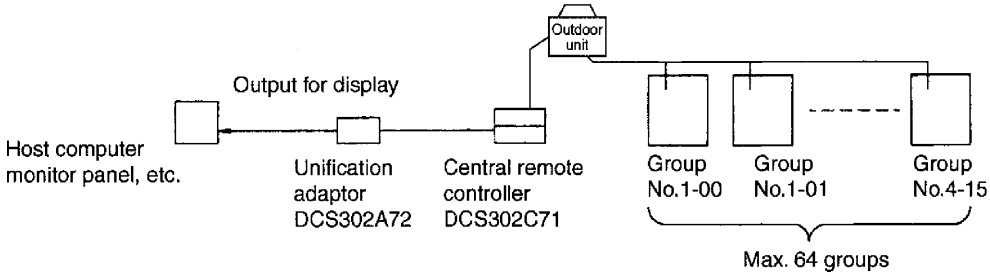
C:1P161221

3.6 DCS302A72 Unification Adaptor for Computerized Control

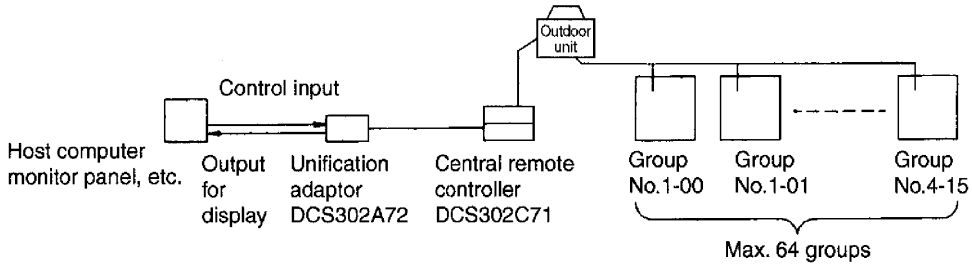
3.6.1 Function

When connected to the central remote controller, this kit enables unified display (operation/malfunction) and unified control (operation/stop).

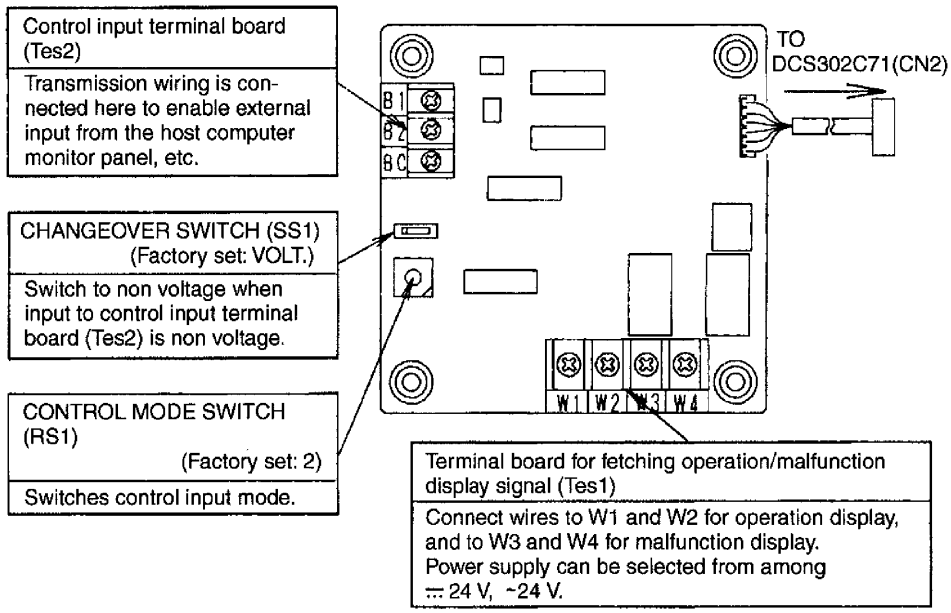
1. Unified Display



2. Unified Control



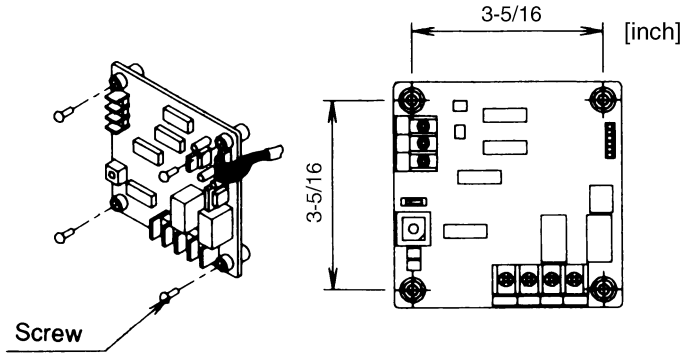
3.6.2 Names of Parts and Function


Control input terminal board (Tes2)
Transmission wiring is connected here to enable external input from the host computer monitor panel, etc.
CHANGEOVER SWITCH (SS1) (Factory set: VOLT.)
Switch to non voltage when input to control input terminal board (Tes2) is non voltage.
CONTROL MODE SWITCH (RS1) (Factory set: 2)
Switches control input mode.
TO DCS302C71(CN2)
B1
B2
BC
W1
W2
W3
W4
Terminal board for fetching operation/malfunction display signal (Tes1)
Connect wires to W1 and W2 for operation display, and to W3 and W4 for malfunction display.
Power supply can be selected from among ⎓ 24 V, ~24 V.

C:1P127045

3.6.3 Installation

- Securely install the adaptor inside the electric panel box (field supplied) with the 4 attached screws.
- Install the adaptor in a place within 16ft. from the central remote controller to enable cable connection.



Note

1. Do not damage the PC board with your screwdriver, etc.
2. Install the adaptor inside an electric panel box to protect from electromagnetic waves and dust.

3.6.4 Electric Wiring Work and Initial Setting

First, wire between the indoor and outdoor units, and between each unit and the power supply source. Then, wire between the indoor unit and remote controller. Finally, check operation is normal.

For details, refer to the installation manuals for the indoor and outdoor units.

Next, wire between the indoor unit and the central remote controller. Then, wire the central remote controller to the power supply source and make the necessary settings. Finally, check operation is normal.

For details, refer to the installation manuals for the central remote controller.

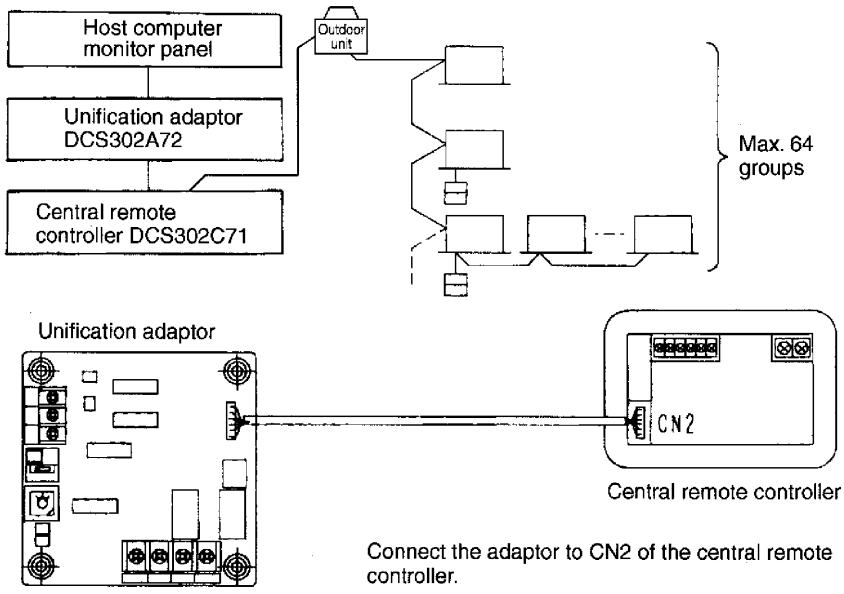
Wire between the unification adaptor for computerized control and the central remote controller.

Refer to WIRING TO THE CENTRAL REMOTE CONTORLLER

Set the CHANGE OVER SWITCH and CONTROL MODE SWITCH. And, wire to the host computer monitor panel or other external input device.

Refer to WIRING TO EXTERNAL INPUT DEVICES

<Wiring to the Central Remote Controller>



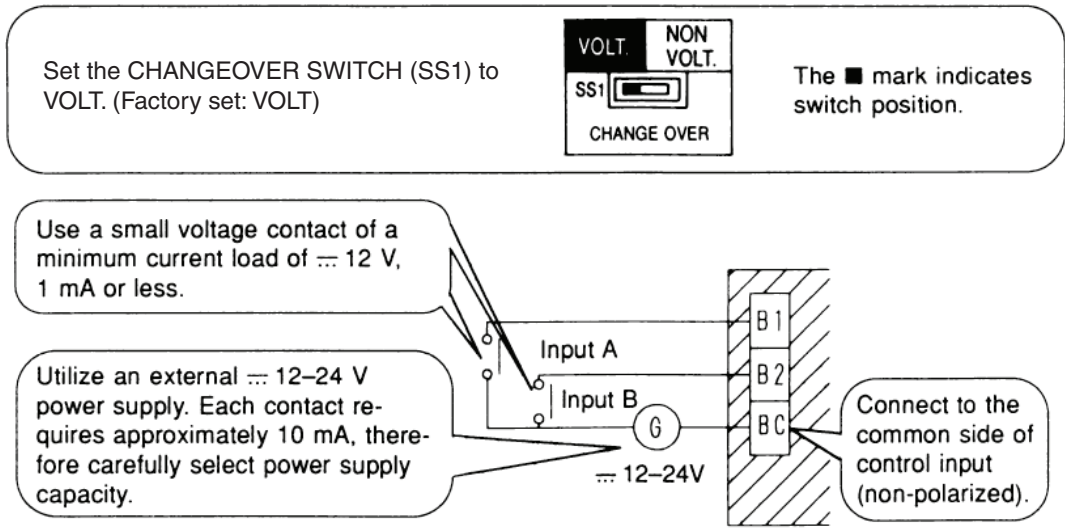
C:1P127045

<Wiring to External Input Devices>

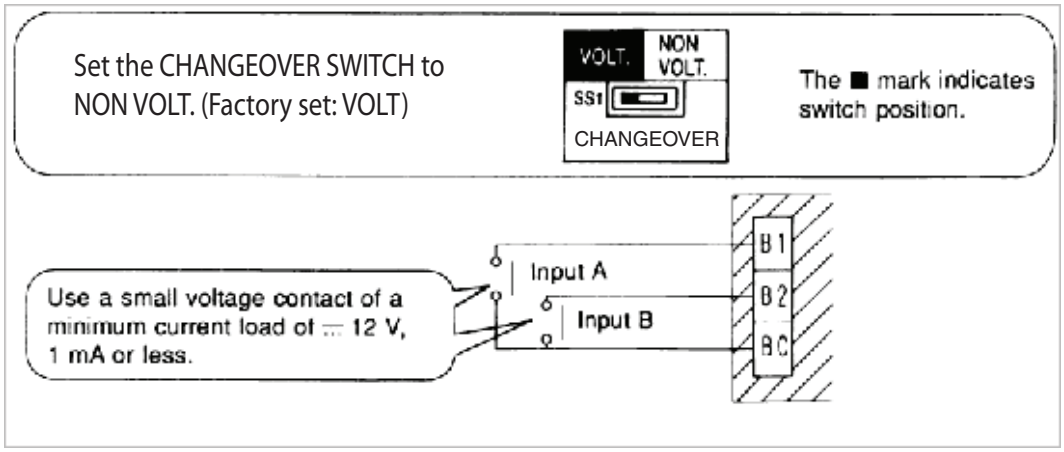
(Wire specifications)
AWG #18 or #16 gauge sheathed vinyl cord or cable (2-wire)
Max. length: 490ft.

1. Control Input (Unified Operation/Stop)

Wire as explained here following, depending on whether input carries a voltage (VOLT.) or not (NON VOLT.).
(1) Input with Voltage


Set the CHANGEOVER SWITCH (SS1) to VOLT. (Factory set: VOLT)
VOLT.
NON VOLT.
SS1
CHANGE OVER
The ■ mark indicates switch position.
Use a small voltage contact of a minimum current load of ⎓ 12 V, 1 mA or less.
Utilize an external ⎓ 12–24 V power supply. Each contact requires approximately 10 mA, therefore carefully select power supply capacity.
Input A
Input B
G
⎓ 12–24V
B1
B2
BC
Connect to the common side of control input (non-polarized).

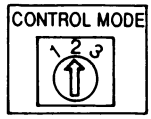
(2) Input with Non Voltage



C:1P127045

2. Control Mode Switch (RS1) Setting

Control mode can be selected from input A and B at this switch on the PC board adaptor.
(Factory set: 2)



(1) For Normal Operation by Input A

Position	Input A
2	OFF → ON: Unified Operation
	ON → OFF: Unified Stop

■ Input B can be disregarded.

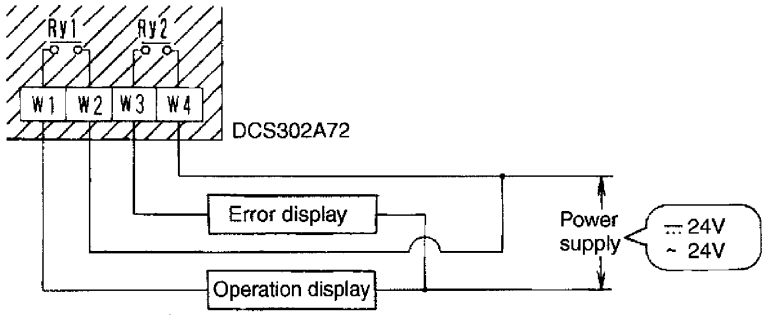
(2) For Instantaneous Operation by Input A and B
(Use an instantaneous input of 400 mili-sec. or more at ON time.)

Position	Input A	Input B
3	On: Unified Operation	ON: Unified Stop

(3) Do not set the switch to position 1. This switch can be set at any time.

3. Fetching the Display Signal

Terminals W1 - W4 are non voltage contacts used in normal operation to output operation display (W1 and W2) and malfunction display (W3 and W4) signals.
(The allowable current per contact is 10 mA - 3A.)



Output conditions are indicated as below.

When Ry1 and Ry2 are OFF	When only Ry1 is ON	When only Ry2 is ON
All indoor units are stopped.	No error has occurred with the indoor units, and at least 1 unit is operating.	At least 1 unit has stopped operating due to malfunction, or a communications error has occurred between the central remote controller and the indoor unit.

C:1P127045

Warning

Daikin Industries, Ltd.'s products are manufactured for export to numerous countries throughout the world. Daikin Industries, Ltd. does not have control over which products are exported to and used in a particular country. Prior to purchase, please therefore confirm with your local authorized importer, distributor and/or retailer whether this product conforms tot he applicable standards, and is suitable for use, in the region where the product will be used. This statement does not purport to exclude, restrict or modify the application of any local legislation.

Ask a qualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire, or explosion.

Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire, or explosion.

Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any inquiries, please contact your local importer, distributor, or retailer.

CAUTIONS ON PRODUCT CORROSION:

1. **Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced.**
2. **If the outdoor unit is to be installed close to the seashore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the seashore, contact your local distributor.**

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JMI-0107

Organization:
DAIKIN INDUSTRIES, LTD.
AIR CONDITIONING MANUFACTURING DIVISION

Scope of registraton:
THE DESIGN/DEVELOPMENT AND MANUFACTURE OF COMMERCIAL AIR CONDITIONING, HEATING, COOLING, REFRIGERANT EQUIPMENT, COMMERCIAL HEATING EQUIPMENT, RESIDENTIAL AIR CONDITONING EQUIPMENT, HEAT RECLAIM VENTILATION, AIR CLEANING EQUIPMENT, MARINE TYPE CONTRAINER REFRIGERANT UNITS, COMPRESSORS, AND VALVES.

JQA-1452

Organization:
DAIKIN INDUSTRIES (THAILAND) LTD.

Scope of registraton:
THE DESIGN/DEVELOPMENT AND MANUFACTURE OF AIR CONDITIONERS, AND THE COMPONENTS INCLUDING COMPRESSORS USED FOR THEM.

EC99J2044

All of the Daikin Group's business facilities and subsidiaries in Japan are certified under the ISO 14001 international standard for environment management.

Dealer

DAIKIN AC (AMERICAS), INC.
1645 Wallace Drive, Suite 110
Carrollton, TX75006
info@daikinac.com
www.daikinac.com

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